# An Analysis of the Retail Sector in Loudoun County



### An Analysis of the Retail Sector in Loudoun County

#### **Table of Contents**

| Executive Summary  | ii                  |
|--|---------------------|
| Introduction   | 1                   |
| Section I - Retail Trends  | 1                   |
| Retail Employment Trends   | 1                   |
| Retail Sales Trends  | 3                   |
| Retail Sales by Category   | 6                   |
| Section II - Trends in Retail Centers  | 8                   |
| Trends in Retail Space   | 8                   |
| The Distribution of Retail Centers by Size and by Type                       | 9                   |
| Vacancy Rates in Loudoun County  | 12                  |
| Section III - Retail Sales Capture and Leakage                               | 13                  |
| Retail Capture/Leakage as Percent of Total Retail Sales                      | 18                  |
| Retail Sales Capture and Leakage by Category                                 | 19                  |
| Retail Capture/Leakage by Category as Percent of Total Retail Sales          | 21                  |
| Section IV - Comparing the Supply of Retail Space with Demand in Loudoun Cou | unty22              |
| Projecting Retail Supply   | 23                  |
| Projecting Retail Demand in Loudoun County                                   | 23                  |
| Comparison of Supply and Demand  | 26                  |
| Section V -Conclusions   | 27                  |
| Appendix 1 - A Description of the Retail Sales Categories                    | p. 1-1 to App. 1-3  |
| Appendix 2 - Vacancy Rates in Loudoun CountyAp                               | p. 2-1 to App. 2-2  |
| Appendix 2 - Map of the Retail Centers in Loudoun County                     | App. 2-3            |
| Appendix 2 - Retail Centers in Loudoun CountyApp                             | . 2-1 to App. 2-26  |
| Appendix 3 - Methodology for Calculating Retail Sales Capture/LeakageApp     | o. 3-1 to App. 3-2  |
| Appendix 4 - Retail Sales Capture/Leakage by Category for All LocalitiesApp  | o. 4-1 to App. 4-14 |

## An Analysis of the Retail Sector in Loudoun County Executive Summary

In 2000, the retail sector employed 27,344,100 persons in the U.S. Employment in that sector increased by 1.9 percent annually during the 1990's. The retail sector in the Washington Metro Area employed 473,217 persons in 2000 and increased by 1.1 percent annually during the 1990's. In Loudoun County, total retail employment in 2000 was 17,522. During the 1990's, retail employment averaged an annual increase of 9.7 percent in Loudoun County.

Retail sales in the U.S. have increased each year since 1992 and were nearly \$3.4 trillion in 2001. Retail sales in the Washington Metro Area were \$62.2 billion in 2001 and were sixth highest out of 318 metropolitan areas. Total retail sales in Loudoun County were \$2.2 billion in 2001.

Vacancy rates for retail centers in Loudoun County are only available for the years 1993, 1995, and 2001. In 1993, retail center vacancy rates were 13.1 percent. In 1995, the retail center vacancy rate decline to 9.5 percent. In 2002, the retail vacancy rate in Loudoun County was 3.3 percent. The majority of the vacant retail space in that period was located in the Sterling Subarea.

The Washington Metro Area typically "captures" retail sales. In 2001, it is estimated that the region captured approximately \$8.5 billion in retail sales. However, the level at which the Washington Metro Area has captured retail sales has been in decline during the past decade. In 1989, the Washington Metro Area captured approximately \$11.1 billion in retail sales, in 2001 dollars, from localities outside the Metro Area. It is important to note that the region is still in the desirable position of capturing retail sales, however the decline in the amount of retail sales captured during the 1990's is of some concern.

Loudoun County captured \$792 million in retail sales in 2001. The amount of retail sales captured has increased in Loudoun County for each of the years between 1989 and 2001. In 1989, the total value of retail sales capture was \$292.1 million, in 2001 dollars. Fairfax County led all the localities in the Washington Metro Area in the amount of retail sales captured in 2001. In fact, in 2001, Fairfax County captured \$4.5 billion in retail sales from other jurisdictions. Montgomery and Prince William Counties were also among the region's leaders with \$2.2 billion and \$2.1 billion in retail sales captured during that year, respectively.

In 2001, 13.6 percent of all retail sales in the Washington Metro Area were captured from localities outside the Washington Metro Area. Among individual localities, Spotsylvania leads all localities in the Washington Metro Area in the degree to which it captures retail sales. In fact, retail sales captured from outside localities were responsible for 45 percent of Spotsylvania's total retail sales in 2001. Captured retail sales comprised approximately 37 percent of the total retail sales in Loudoun County in 2001.

In 2001, there was 7,272,210 square feet of existing retail space in Loudoun County. Further, there was a total of 6,112,491 square feet of approved major retail space in Loudoun County in 2001. During 2001, there was a total of 27,726 square feet of space that was rezoned for a retail use. Therefore, the total supply of retail space in Loudoun County, including both existing and approved retail space, was 13,412,427 square feet. Retail demand is projected to increase from 6,664,789 in 2000 to 17,406,324 square feet by 2020. Given current trends, it appears that the amount of existing and approved retail space will be sufficient to meet demand of both Loudoun residents and visitors through 2012. However, it is important to note that changes in retail sales per household, changes in share of total retail sales captured from other localities and changes in other economic and demographic variables may effect this projection.

## An Analysis of the Retail Sector in Loudoun County Loudoun County Department of Economic Development January 2003

#### Introduction

The retail industry is a large part of the national and local economy. When measured by total full and part time employment, retail is the second largest industrial sector of the U.S. economy. The retail sector, whether measured in employment or sales, typically increases each non-recessionary year. Due to strong national economic growth in the U.S., retail employment in the U.S has grown in each of the years since 1991. Similarly, retail sales have increased every year since 1991.

Changes in retail sales are widely viewed as the timeliest indicator of broad consumer spending patterns. Because of the relatively large size of the retail sector, and in particular, the large number of jobs generated by that sector, and the importance of consumer patterns, retail is often a topic of study for regional economists and economic development practitioners.

This study will report on the state of and trends in the retail industry in the U.S., the Washington Metro Area<sup>1</sup> and the localities contained therein with particular attention to Loudoun County. Section one will report on retail trends including retail employment and retail sales. Section two will report on trends in retail centers. Included in that section will be a report of the types of shopping centers serving Loudoun County compared with industry trends. An inventory of Loudoun County's shopping centers, complete with location, contact information, and the stores found within those shopping centers accompany that research. Section three contains an analysis of the flow of retail sales across the borders of the Washington Metro Area and across the borders of all the localities within the Washington Metro Area. That analysis will also be performed on retail sales in each of the localities by retail category. In section four, the supply of and demand for retail space will be projected through 2020 for Loudoun County. Section five offers conclusions from the report.

#### Section I Retail Trends

#### **Retail Employment Trends**

When measured by total full and part time employment, the retail sector is second only to the service sector. In 2000, the retail sector employed 27,344,100 full and part time employees in the U.S. Between 1970 and 2000, the U.S. economy added on average more than 454,800 retail trade jobs annually increasing at an average annual rate of 3.3 percent. Most recently however, that rate of growth has slowed. During the 1990's, retail employment in the U.S. averaged an increase of 1.9 percent.

<sup>&</sup>lt;sup>1</sup> The Washington Metro Area includes the District of Columbia, the Counties of Calvert, MD, Charles, MD, Frederick, MD, Montgomery, MD, Prince George's, MD, Arlington, VA, Clark, VA, Culpeper, VA, Fairfax, VA, Fauquier, VA, King George, VA, Loudoun, VA, Prince William, VA, Spotsylvania, VA, Stafford, VA, Warren, VA, Berkeley, WV, Jefferson, WV, and the cities of Alexandria, VA, Fairfax, VA, Falls Church, VA, Fredericksburg, VA, Manassas, VA, and Manassas Park, VA and refers to the Washington, DC-MD-VA-WV PMSA as defined by the Office of Management and Budget (OMB) for Federal statistical purposes.

Total retail employment in the U.S. rarely declines from one year to the next. In fact, a decline in total retail employment in the U.S. has only occurred twice since 1970. Those years were in 1975 and 1991, both during recessions in the U.S. In 1975, retail employment in the U.S. declined by 126,400, a 0.8 percent decline. In 1991, retail employment in the U.S. declined by 144,100 representing a decline of 0.6 percent.

Total retail employment had been becoming an increasingly important role in the U.S economy from 1969 through the mid 1990's. In 1969, retail employment was 14.8 percent of total employment in the U.S. Between that time and 1996, employment in retail as a percent of total employment increased steadily, reaching a peak of 16.9 percent in 1996. Since 1996, however retail trade's share of employment in the U.S has diminished to 16.3 percent of total employment. One cause of the retail sector's declining share of total employment in the U.S. is the increasing role of other sectors in the U.S. economy during that period, such as services and construction. Retail employment as a percent of total employment in the U.S. between 1969 and 2000 can be seen below in Figure 1.



Figure 1

The retail sector in the Washington Metro Area employed 473,217 full and part time employees in 2000. Total retail employment in the Washington Metro Area has typically increased each year with only several exceptions, averaging an annual increase of 3.6 percent for the period of 1970 to 2000. That sector experienced a decline in employment only four times during the last thirty years, three of which occurred in the 1990's. Total retail employment in the Washington Metro Area declined in 1991, 1992, and 1998. The decline in retail employment in 1991 was 12,801, representing a decline of 3.0 percent. The declines in 1992 and 1998 were much more modest, declining by 2,505 and 955 employees, respectively. Despite these declines, retail employment in the Washington Metro Area has trended upward in the last decade. During the 1990's the average annual increase of retail employment was 4,585, or 1.1 percent.

The retail sector is not as dominant in the Washington Metro Area due to the disproportionately large share of federal employment. In fact, retail employment is the third largest sector in the Washington Metro Area economy behind, services and government. In 2000, retail employment constituted 13.5 percent of total employment in the Washington Metro Area. Among all 318 metropolitan areas, the Washington Metro Area's share of total retail employment in that year was among the lowest, ranking 312<sup>th</sup>. Retail employment as a percent of total employment in the Washington Metro Area reached a peak in 1987 of 14.6 percent. Most recently, the retail sector's share of total employment in the Washington Metro Area has been declining for four consecutive years.

In Loudoun County, total retail employment in 2000 was 17,522. In that year, 3.9 percent of the Washington Metro Area's retail employment was in Loudoun County. Strong population and income growth in Loudoun County have driven increases in Loudoun County's retail sector. Retail employment has increased in each of the past 30 years with the exception of 1971, 1981-1982 and 1992. In 1971, retail employment in Loudoun County declined by 8 employees. During 1981 and 1982, the retail sector in Loudoun County shed 51 and 176 employees, respectively. In 1992, retail employment declined by 11 employees. Retail employment in Loudoun County experienced its most dramatic growth in the 1990's. During that decade, retail employment averaged an increase of 1,051 employees annually, or 9.7 percent, more than five times the national rate of growth.

In Loudoun County, retail was the second largest sector in 2000 and comprised 15.8 percent of total employment. In fact, retail employment's share of total employment was at its highest in that year. Retail employment as a percent of total employment in Loudoun County has increased for seven consecutive years between 1993 and 2000 with the exception of 1998.

#### **Retail Sales Trends**

Retail sales have continued to be an increasing part of the U.S. economy and have increased nearly every year with few exceptions. Retail sales are primarily driven by four variables. Those variables are population change, inflation, changes in household incomes, and changes in households' propensity to consume. Three of those four variables typically increase every year. In fact, population has increased in the U.S. for 83 years consecutively. Similarly, inflation has increased every year for 46 consecutive years. Median household incomes, the third factor, have steadily increased during the past three decades, driven by both an increase in earnings per worker and an increase in the number of workers per household. The fourth factor, the amount of income spent on retail sales per dollar of total income has steadily declined during the past 30 years, however, that decline has been more than offset by increases in the other three factors. Given that three of the four variables that influence retail sales typically increase annually, it is expected that total retail sales increase nearly every.

Adjusted for inflation, retail sales in the U.S. have increased each year since 1992 and were nearly \$3.4 trillion in 2001<sup>2</sup>. The inflation adjusted annual average change in retail sales has been 2.6 percent annually for each of the years between 1969 and 2001. During the period between 1969 and 2001, retail sales in the U.S. experienced three periods of decline, after adjusting for inflation. Those periods were from 1973 to 1974, 1980 to 1982, and 1991 and each coincided with a national recession. Between 2000 and 2001, retail sales increased by 1.9 percent, despite most of 2001 being classified as a recession. Total retail sales in the U.S. from 1969 to 2001, adjusted for inflation, can be seen in Figure 2 below. In that figure the strong growth in retail sales that occurred during the economic expansion in the 1990's is evident.

-

<sup>&</sup>lt;sup>2</sup> Unless otherwise noted, all monetary figures in this study will be reported in 2001 dollars. Retail sales as reported here will include motor vehicles and parts and food and beverage stores but will exclude food services (e.g., restaurants).

Figure 2



Similar to the U.S, retail sales in the Washington Metro Area have increased continuously from 1992 to 2001, reaching approximately \$62.2 billion in 2001. Retail sales in the Washington Metro Area were nearly two percent of total retail sales in the U.S. in that year and were sixth highest out of 318 metropolitan areas<sup>3</sup>. Total retail sales in the top ten Metropolitan Areas in the U.S. can be seen in Table 1. The Washington Metro Area has experienced a high volume of retail sales for several reasons. Among them were the region's large population, high incomes relative to the U.S, and the region's position as a tourism destination.

Table 1

Total Retail Sales in the Top Ten Metro Areas in the U.S. 2001, in Millions of 2001 Dollars

| <u>Metro Area</u>                                | Total Retail Sales |
|--|--------------------|
| CHICAGO, IL                                      | \$100,191.9        |
| LOS ANGELES-LONG BEACH, CA                       | \$96,907.9         |
| BOSTON-WORCESTER-LAWRENCE-LOWELL-BROCKTON, MA-NH | \$81,435.2         |
| NEW YORK, NY                                     | \$77,453.2         |
| PHILADELPHIA, PA-NJ                              | \$62,814.1         |
| WASHINGTON, DC-MD-VA-WV                          | \$62,165.9         |
| ATLANTA, GA                                      | \$59,064.9         |
| DETROIT, MI                                      | \$58,622.7         |
| HOUSTON, TX                                      | \$50,512.2         |
| DALLAS, TX                                       | \$48,067.8         |

Source: Woods & Poole

\_

<sup>&</sup>lt;sup>3</sup> Metro areas reported here will refer to either metropolitan statistical areas (MSAs), primary metropolitan statistical areas, (PMSAs), or New England County Metropolitan areas (NECMAs). Consolidated metropolitan statistical areas (CMSA) were excluded. That being the case, the Washington Metropolitan area refers to the Washington PMSA, not the Washington-Baltimore CMSA.

Historically, retail sales growth in the Washington Metro Area has typically outperformed the U.S. This was particularly true in the 1980's where inflation adjusted growth in retail sales in the Washington Metro Area nearly doubled corresponding national growth rates. In the 1990's however, the Washington Metro Area's retail sales grew by 26.3 percent while the comparable figure for the U.S. was 33.4 percent. Possible explanations for the Washington Metro Area's underperformance in retail sales growth relative to the U.S. during the 1990's will be offered below. In the current decade, the Washington Metro Area's retail sales growth rate has moderately exceeded the U.S. Retail sales growth rates by decade in the Washington Metro Area and the U.S. can be seen Figure 3.

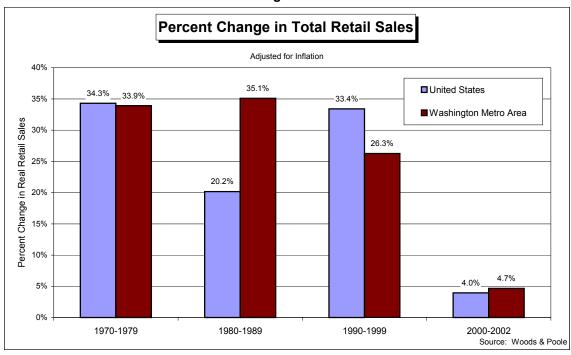


Figure 3

As stated above, the Washington Metro Area underperformed the U.S. in retail sales growth during the 1990's. Three possible explanations for this occurrence are offered here. First, incomes in the Washington Metro Area increased at a rate slower than comparable national figures during that period. Between 1990 and 2000, median household income growth, adjusted for inflation, was 0.7 percent in the Washington Metro Area as compared to 6.0 percent in the U.S. Since incomes are one of the primary drivers of retail sales, it would be expected that areas with slower than average income growth might also experience slower than average retail sales growth. Second, the net amount of retail sales captured from jurisdictions outside of the Washington Metro Area has been declining during the 1990's. The definition and a discussion on retail sales capture and leakage are offered in Section III below. Finally, it is possible that disproportionately high housing costs displaced retail spending in the Washington Metro Area during the 1990's. In 2000, the average household in the Washington Metro Area spent 35.4 percent of total annual expenditures on housing. This compares to only 32.4 percent in the U.S.

In Loudoun County, total retail sales have increased significantly during the last three decades. Total retail sales in Loudoun County increased from \$192.6 million in 1969 to \$2.2 billion in 2001, adjusted for inflation. That represents an inflation adjusted annual average increase of 7.9 percent, more than three times the comparable national growth rate during that period. Loudoun County's retail sales have experienced only one year of contraction since 1969. That took place

during the 1991 recession where retail sales in Loudoun County declined by \$3.9 million or 0.5 percent.

Loudoun County has been developing an increasing role as a retail center in the Washington Metro Area. Loudoun County's share of the region's retail sales has increased steadily during the last three decades. In 1969, less than one percent of the region's retail sales took place in Loudoun County. That figure has increased to 3.5 percent in 2001. Further, in 1969, Loudoun County was ranked twelfth in retail sales out of the 20 localities in the Washington Metro Area. Loudoun County's rank has since improved to ninth in the Washington Metro Area in 2001. Total retail sales by locality in 2001 can be seen in Figure 4. As can be seen in that figure, retail sales in the localities of the Washington Metro Area are dominated by a few selected localities. In fact, the top five localities in retail sales comprise nearly three-quarters of total retail sales in the Washington Metro Area. Those localities are Fairfax County, Montgomery County, Prince George's County, the District of Columbia, and Prince William County.

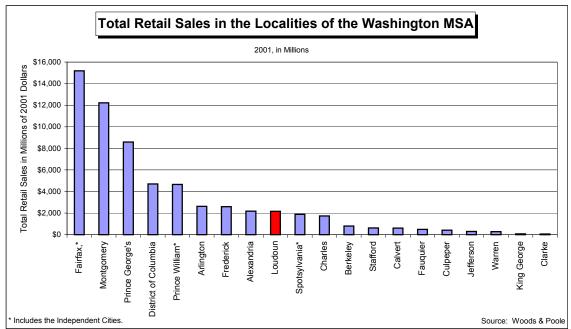


Figure 4

#### **Retail Sales by Category**

Retail sales data by category are available for the U.S., the Washington Metro Area, and Loudoun County and can be obtained from the 1997 Economic Census. Although that data is slightly dated, it is the most recent data available that is consistent across these geographies. Those data are disaggregated into twelve different categories including motor vehicles & parts, furniture & home furnishings, electronics & appliance stores, building material & garden equipment & supplies dealers, health & personal care stores, gasoline stations, clothing & clothing accessories stores, sporting goods, hobby, books, & music stores, general merchandise stores, miscellaneous store retailers, and nonstore retailers. A complete description of each of these categories can be found in Appendix 1.

In the U.S. in 1997, motor vehicles & parts dealers were the largest component among retail categories totaling \$712.1 billion, in 2001 dollars. Retail sales of motor vehicles & parts dealers

<sup>&</sup>lt;sup>4</sup> Unless otherwise noted, for the purposes of this analysis, all county figures include the independent cities contained within.

comprised 26.2 percent of total retail sales in the U.S. in that year. Retail sales in food & beverage stores were the second largest component of retail sales in the U.S. in 2001, totaling \$443.3 billion or 16.3 percent of total retail sales. Retail sales in general merchandise stores was the third largest component with total retail sales of \$364.6 billion, or 13.4 percent of the total. All other categories were less than ten percent of total retail sales. Retail sales and shares by category in the U.S. can be seen in Table 2 below.

In the Washington Metro Area, motor vehicles & parts dealers were also the largest component among retail categories. In that year, total retail sales of motor vehicles & parts were \$12.4 billion, comprising 25.7 percent of total retail sales in that year. Like the U.S., food & beverage stores was also the second largest component of retail sales in the Washington Metro Area in 1997, however the share of total retail sales in this category was considerably larger than the comparable U.S. figure. Food & beverage stores sales totaled \$9.1 billion in 1997, comprising 18.8 percent of total retail sales in the Washington Metro Area. Conversely, general merchandise stores comprised a disproportionately smaller share of total retail sales in the Washington Metro Area in 1997. In the Washington Metro Area, those sales were 11.9 percent of total retail. Retail sales and shares by category in the Washington Metro Area can be seen in Table 2 below.

In Loudoun County, motor vehicles & parts dealers were also the largest component among retail categories, however that category was significantly smaller than the U.S. figure. In 1997, total retail sales of motor vehicles & parts in Loudoun County were \$293.8 million, comprising 20.8 percent of total retail sales. The percent of retail sales in food & beverage stores and general merchandise stores in Loudoun County were both larger than the comparable U.S. share. In fact, retail sales in food & beverage stores comprised 19.3 percent of total sales and retail sales in general merchandise stores comprised 17.1 percent of total sales. Retail sales and shares by category in Loudoun County can be seen in Table 2 below. <sup>5</sup>

 Table 2

 Distribution of Retail Trade in Loudoun, Washington Metro Area, and the U.S. by Category 1997, in 2001 Dollars

| 5.40.  | Loudoun County,  |                |                    |                |                 |                |
|--|------------------|----------------|--------------------|----------------|-----------------|----------------|
| Retail Category                                  | VA               |                | Washington, PMSA   |                | United States   |                |
|  | Sales            | Doroont        | Sales<br>(\$4,000) | Doroont        | Calaa (#1 000)  | Doroont        |
|  | <u>(\$1,000)</u> | <u>Percent</u> | <u>(\$1,000)</u>   | <u>Percent</u> | Sales (\$1,000) | <u>Percent</u> |
| Motor vehicle & parts dealers                    | \$293,840        | 20.8%          | \$12,429,280       | 25.7%          | \$712,116,094   | 26.2%          |
| Food & beverage stores                           | \$272,776        | 19.3%          | \$9,098,239        | 18.8%          | \$443,317,712   | 16.3%          |
| General merchandise stores                       | \$241,859        | 17.1%          | \$5,747,776        | 11.9%          | \$364,621,270   | 13.4%          |
| Building mat'l & garden eqpt. & supplies dealers | \$143,611        | 10.2%          | \$4,041,509        | 8.4%           | \$251,102,533   | 9.2%           |
| Gasoline stations                                | \$108,764        | 7.7%           | \$3,273,895        | 6.8%           | \$218,661,437   | 8.1%           |
| Clothing & clothing accessories stores           | \$55,861         | 3.9%           | \$3,610,368        | 7.5%           | \$150,504,816   | 5.5%           |
| Nonstore retailers                               | \$26,632         | 1.9%           | \$1,060,972        | 2.2%           | \$135,839,177   | 5.0%           |
| Health & personal care stores                    | \$46,495         | 3.3%           | \$2,130,021        | 4.4%           | \$129,874,286   | 4.8%           |
| Miscellaneous store retailers                    | \$57,170         | 4.0%           | \$1,364,292        | 2.8%           | \$86,187,741    | 3.2%           |
| Furniture & home furnishings stores              | \$57,832         | 4.1%           | \$1,761,394        | 3.6%           | \$79,105,564    | 2.9%           |
| Electronics & appliance stores                   | \$53,403         | 3.8%           | \$2,067,821        | 4.3%           | \$75,652,409    | 2.8%           |
| Sporting goods, hobby, book, & music stores      | \$56,362         | 4.0%           | \$1,694,100        | 3.5%           | \$68,424,517    | 2.5%           |
| Total  | \$1,414,604      | 100.0%         | \$48,279,667       | 100.0%         | \$2,715,407,556 | 100.0%         |

Source: 1997 Economic Census

7

.

<sup>&</sup>lt;sup>5</sup> Data for general merchandise stores and miscellaneous retailers was suppressed for Loudoun County. Those data were estimated based on U.S. shares.

## Section II Trends in Retail Centers

#### **Trends in Retail Space**

Further demonstrating the increased importance the retail sector has experienced in the U.S. economy is the rate at which the number of retail centers has increased. In 1970, there were approximately 11,000 shopping centers in the U.S. By 2001, that figure had increased to 45,700. The rate of growth in shopping centers, 315.5 percent between 1970 and 2001, far out paced the rate of household growth of 67.4 percent during the same period. In fact, in 1970, there were 5,817 households for every shopping center in the U.S. In 2001, that figure had declined to 2,344.

Another measure of the retail industry is leasable retail space measured in square footage. In 1970, there was 1.49 billion square feet of leasable retail space in shopping centers. That figure had increased to 5.7 billion square feet by 2001, representing an increase in total leasable retail space of 281.2 percent during the entire period. The most dramatic growth in leasable retail space occurred in the 1970's with total leasable retail space increasing by 87.2 percent during that decade. A more moderate growth rate in leasable retail space was experienced in the 1980's. Between 1980 and 1989, total leasable retail space in shopping centers increased 42.2 percent in the U.S. Between 1990 and 2000, total leasable retail space in the U.S. increased at a rate of 24.4 percent or approximately 2.4 percent per year. That trend of slower growth in leasable retail space has appeared to continue into the current decade. The increase in total retail space between 2000 and 2001 was 2.0 percent in the U.S. The percent change in total retail space in shopping centers in the U.S. can be seen in Figure 5. The stabilization in the rate at which retail space has been added in the last decade can be seen in that figure.

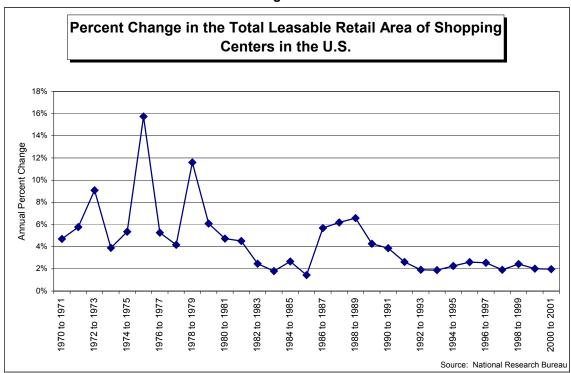


Figure 5

Similar to the number of shopping centers, the rate of increase in total leasable retail area has also outpaced household growth. This can be measured by calculating the amount of retail area

there was per household in the U.S. In 1970, the total leasable retail space in shopping centers was 23.3 square feet per household. That figure increased each of the years between 1970 and 2001 reaching 50.3 square feet of retail space per household in 2001. Retail space per household increased at an annual average rate of 4.1 percent in the U.S. between 1970 and 2001. That rate of growth was significantly slower in the last decade however. Between 1991 and 2001, retail space per household has increased at an average annual rate of 0.9 percent.

Another important measure in the retail industry is the sales per square foot of retail space. This figure, which is presented for the period 1970 to 2001, fluctuated between \$50 and \$60 per square foot. Throughout the 1990's, retail sales per square foot in the U.S. had been increasing. In fact since 1992, retail sales per square foot increased every year for 8 consecutive years. In the latest year for which data is available, it appears that retail sales per square foot have declined. In 2000, retail sales per square foot was \$59.58 but had decline to \$59.39 in 2001. Retail sales per square foot of retail space in the U.S. are displayed on Figure 6. It appears that this figure follows general national economic trends closely. The recessions in the mid 1970's, early 1980's and early 1990's coincide with declines in retail sales per square foot of retail space and are easily detected in that figure.

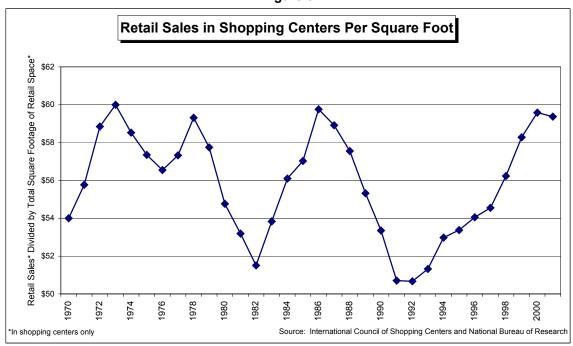


Figure 6

#### The Distribution of Retail Centers by Size and by Type

Retail centers in the U.S in 2001 varied in size from less than 10,000 square feet of gross leasable area to in excess of 1,500,000 square feet and in some cases as much as 2,500,000 square feet. In that year, there were 45,721 retail centers in the U.S. Among those retail centers, the majority were less than 100,000 square feet with a relatively small amount being greater than 1,000,000 square feet.

In Loudoun County in 2001, there were 54 retail centers, 0.12 percent of all U.S. retail centers in the U.S.<sup>6</sup> Like the U.S., smaller retail centers in Loudoun County far outnumbered the larger

\_

<sup>&</sup>lt;sup>6</sup> There were actually 55 retail centers in Loudoun County. This number reported here excludes Dulles 28 Center. Total space in that center was difficult to measure due to the presence of auto dealerships, demolition that took place during the study, and temporary occupancy.

centers. In fact, in 2001, 59.3 percent of all retail centers in Loudoun County were less than 100,000 square feet as compared to 62.3 percent in the U.S. In that year, the share of retail centers ranging from 100,000 to 200,000 square feet constituted 24.1 percent of all retail centers in Loudoun County as compared to 24.3 percent in the U.S. Also, the share of retail centers ranging from 200,000 to 400,000 square feet was 9.3 percent of all retail centers in Loudoun County as compared to 8.8 percent in the U.S. The total share of retail centers over 400,000 square feet in 2001 was 7.4 percent in Loudoun County as compared to 4.6 percent in the U.S. The distribution of retail centers by size in Loudoun County and the U.S. are displayed in Figure 7. In that figure, it can be seen how the distribution of retail centers by size in Loudoun County approximates the U.S. distribution fairly closely.

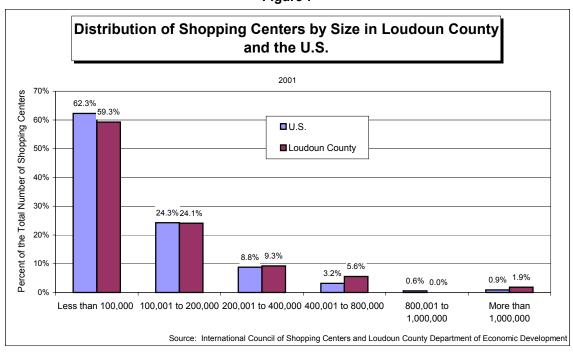


Figure 7

Retail centers serve different markets depending on their size, access, and the stores that are contained with those centers. The different types of retails centers have been classified into five categories and are defined below. Those types are convenience centers, neighborhood centers, community centers, destination centers, and specialty centers.

Convenience centers serve immediate convenience shopping needs for a limited number of items possibly including convenience goods such as food, drugs, and sundries and personal services such as laundry, dry cleaning, barbering, and shoe repair. These centers contain a minimum of three stores and average a gross leasable area of 30,000 square feet. These centers typically serve a market of 500 to 3,000 households within the immediate residential neighborhood.

Neighborhood centers serve routine daily and weekly shopping needs for items such as groceries and personal services. These centers offer little to no comparative goods shopping. These centers differ from convenience centers as a supermarket typically anchors them. Neighborhood centers generally range from 30,000 to 150,000 square feet. These centers generally serve a market of less than 3,000 households.

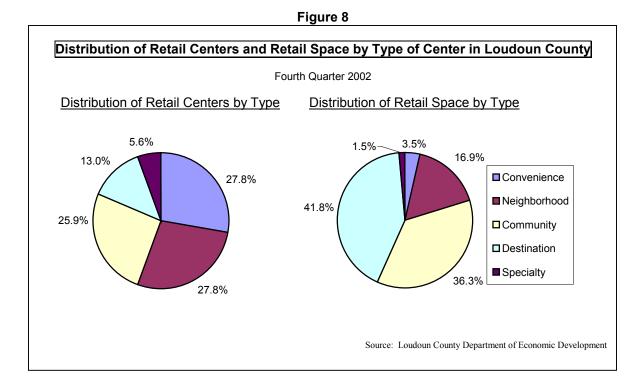
Community centers typically offer a wider variety of daily and weekly shopping and personal service needs, but also offer some comparative shopping for items such as apparel, shoes and

books. These centers typically contain 100,000 to 400,000 square feet of gross leasable area and typically serve residential neighborhoods from 2,000 to 8,000 households.

Destination or regional centers offer the widest variety of comparative and specialty goods and may offer an entertainment component. These centers typically range from 250,000 to 1,500,000 million square feet of gross leasable area. These centers typically serve between 5,000 and 30,000 households from within the locality as well as from outside of the locality.

Specialty centers are centers that cannot be elsewhere classified and vary in size. In Loudoun County, these centers ranged in size from 12,000 square feet to about 72,000 square feet. These centers might contain gift stores, personal services, jewelers, and restaurants. These centers are typically not anchored by any grocery or department store.

In 2002, among the 54 retail centers in Loudoun County, 30 were classified as either convenience or neighborhood centers, representing 55.6 percent of all retail centers in Loudoun County. Those centers totaled over 1.5 million square feet, comprising 20.4 percent of all retail space in Loudoun County. Community centers, which totaled over 2.6 million square feet of retail space, comprised 36.3 percent of the total retail space in Loudoun County. Finally, the six destination centers in Loudoun County were only 13.0 percent of all retail centers but contained 3.1 million square feet of retail space, 41.8 percent of the total retail space in Loudoun County in that year. The distribution of retail space in Loudoun County by the number of shopping centers and by total space can be seen in Figure 8 below. A list of the retail centers in Loudoun County, their sizes, contact information, a map of their location, and the stores they contain can be found in Appendix 2.



<sup>&</sup>lt;sup>7</sup> Total does not include Dulles 28 Center.

#### **Vacancy Rates in Loudoun County**

Another important indicator in measuring the condition of the retail industry is the vacancy rate of retail centers. Vacancy rates are measured by dividing the total vacant amount of retail space, measured in square footage, by the total space. Vacancy rates were collected for all the retail centers in Loudoun County during the fourth quarter of 2002 through phone survey. Due to the difficulty in collecting vacancy rates for retail centers, comparisons with other jurisdictions and the U.S. are not provided. It is important to note that only retail space in retail centers was collected. Vacancy rates for retail centers in Loudoun County are only available for the years 1993, 1995, and 2001.

Vacancy rates appear to have been in decline in Loudoun County since the 1993. In 1993, retail center vacancy rates were 13.1 percent. In that year, a majority of the vacant space was in Leesburg. Vacant retail space in 1993 in Loudoun County totaled 296,962 square feet, of which 174,700 square feet, or 58.8 percent, was in Leesburg. In 1995, the retail center vacancy rate declined to 9.5 percent. Similar to 1993, the majority of the vacant retail space in Loudoun County was located in Leesburg. In 1995, there was 238,440 square feet of vacant space, of which 131,650 square feet, or 55.2 percent, was in Leesburg. In 2002, the steady decline in the retail vacancy rate continued. In that period, the retail vacancy rate in Loudoun County was 3.3 percent. Total vacant retail space in Loudoun County in 2002 was 247,369. Total vacant retail space in the Dulles subarea was 141,400 square feet, or 57.2 percent. Retail vacancy rates for Loudoun County from 1993, 1995, and 2002 can be seen in Figure 9.

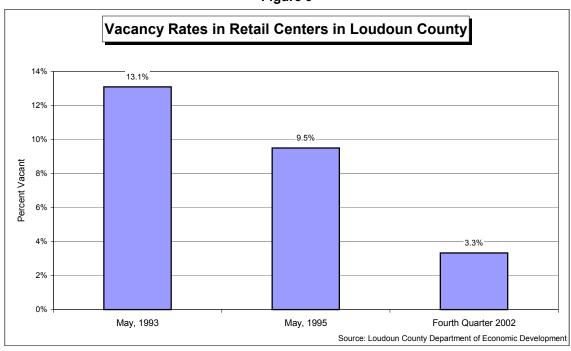


Figure 9

Vacancy rates were also calculated by subarea in Loudoun County for the period during the fourth quarter of 2002. In that period, the Route 7 West subarea had the highest vacancy rates in Loudoun County with a total of 10.4 percent of all retail center space being vacant. That area's vacancy rate was buoyed by a relatively high vacancy rate in Loudoun Valley Shopping Center.

Second among Loudoun County's subareas in vacancy rates was the Sterling Subarea. The relatively high vacancy rate in the Sterling Subarea is due in large part to the Dulles Town Center. In the fourth quarter of 2002, the vacancy rate at Dulles Town Center was 10 percent. Most all

other retail centers in Sterling had vacancy rates of less than 3.5 percent, however, the Dulles Town Center's large amount of space increased the subarea's average. All other subareas in Loudoun County had retail center vacancy rates below 2.5 percent. Vacancy rates for all the subareas in Loudoun County can be seen in Figure 10. Vacancy rates and total retail space by shopping center and subarea can be seen in Appendix 2.

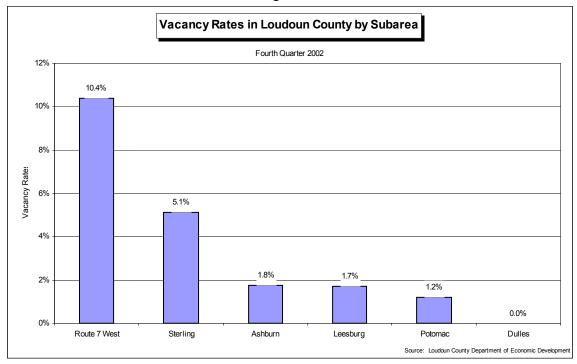


Figure 10

## Section III Retail Sales Capture and Leakage

Typically, retail sales are disproportionately located around urban centers because there is a larger concentration of retail centers in those locations. Further, retail sales are also concentrated in tourist destinations because those attractions typically generate a larger amount of retail sales. The Washington Metro Area is fortunate to be in a position to experience a disproportionately large amount of retail sales higher than would be expected given the area's population and income because of its many retail centers and its position as a tourist destination. The idea that a locality can receive a level of retail sales larger than would normally occur based on that locality's population and income due to urbanization, tourism, or other factors is generally referred to as 'capturing' or 'leaking' retail sales.

Determining the amount of retail sales captured or leaked for an area first requires that data for actual total retail sales be collected for that locality. Then it must be estimated what the retail sales in that locality would have been, based on that locality's resident population and their incomes. Once completed, the actual retail sales that did occur can be compared with the estimate of the retail sales that would have occurred given that locality's population and their incomes. Any locality with actual retail sales greater than those estimated based on their population and income are classified as having "captured" retail sales. Conversely, those localities where actual retail sales were less than estimated retail sales based on income and population are classified as localities that "leaked" retail sales. For example, a locality might have collected \$100 million in total retail sales in 2000. However, given that localities population and

income, it might have been estimated that the locality would collect \$110 million in retail sales in that year. Therefore, it can be concluded that that particular locality "leaked" retail sales in the amount of \$10 million in that year. A complete discussion on the methodology used to calculate retail sales capture and leakage can be found in Appendix 3.

As would be expected, the Washington Metro Area has typically "captured" retail sales. In fact, in 2001, it is estimated that the region captured approximately \$8.5 billion in retail sales. However, the level at which the Washington Metro Area has captured retail sales has been in decline during the past decade. Total retail sales captured for the Washington Metro Area from 1989 to 2001 can be seen in Figure 11.

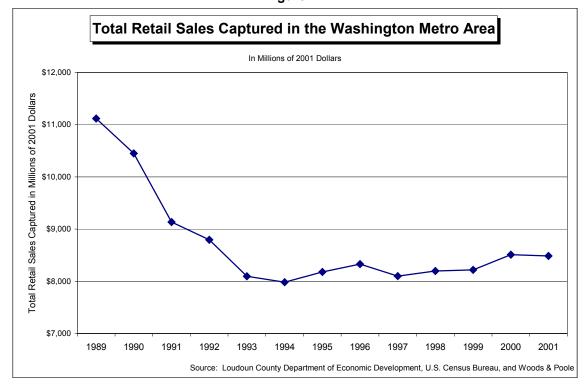


Figure 11

In 1989, the Washington Metro Area captured approximately \$11.1 billion in retail sales, in 2001 dollars. Between 1989 and 2001, the Washington Metro Area experienced a decline in the volume of net retail sales captured of over \$2.6 billion, adjusted for inflation. The effect of a diminishing amount of retail sales captured in the Washington Metro Area during the 1990's, likely contributed to a retail sales growth rate that is slower than the U.S. average in the 1990's, as stated earlier. It is important to note that the region is still in the desirable position of capturing retail sales, however the decline in the amount of retail sales captured during the 1990's is of some concern.

Retail capture and leakage can also be calculated for each of the localities within a metro area. Typically, highly populated suburban localities capture a large amount of retail sales due, in part, to their high number of retail centers. Conversely, rural localities typically leak retail sales as residents sometimes leave their locality to make retail purchases. The level of total retail sales capture or leakage has been calculated for each of the localities in the Washington Metro Area and is presented below.

\_

<sup>&</sup>lt;sup>8</sup> Refer to Figure 3 on page 5.

Fairfax County led all the localities in the Washington Metro Area in the amount of retail sales captured in 2001. In fact, in 2001, Fairfax County captured \$4.5 billion in retail sales from other jurisdictions. Montgomery and Prince William Counties were also among the region's leaders with \$2.2 billion and \$2.1 billion in retail sales captured during that year, respectively.

Loudoun County was also among those that captured retail sales in 2001, capturing \$792.8 million in retail sales in 2001, ranking sixth out of the twenty localities in the Washington Metro Area in the amount of retail sales captured. In that year, eleven of the Washington Metro Area's twenty localities captured retail sales while the remaining nine experienced retail sales leakage. The District of Columbia had the largest retail sales leakage, with more than \$3.9 billion of retail sales being leaked outside of the District's borders. The amount of retail sales captured or leaked in 2001 for each of the localities in the Washington Metro Area can be seen in Figure 12.

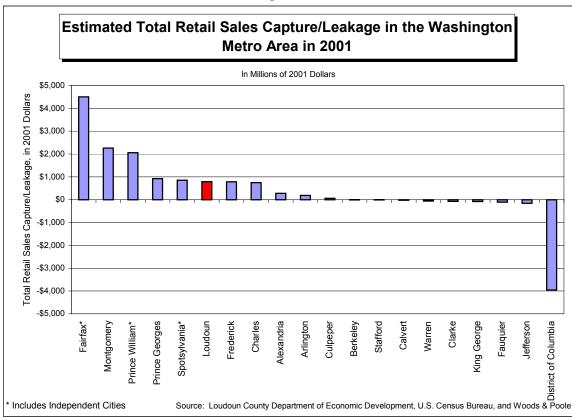
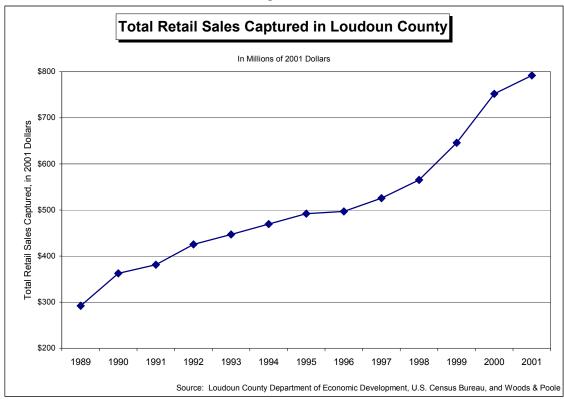


Figure 12

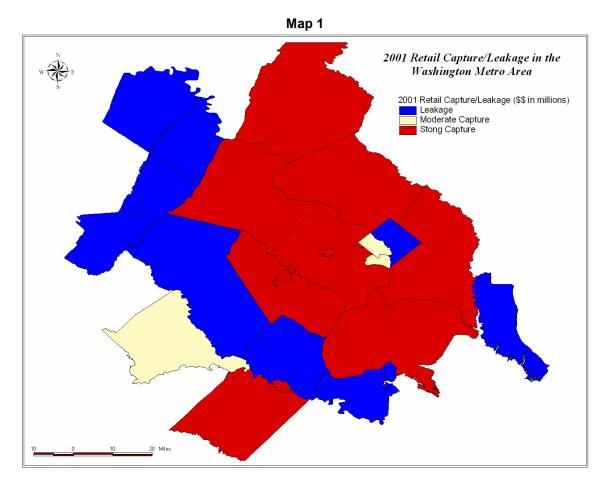
Given Loudoun County's suburban location and strong population and income growth during the past decade, it would be expected that Loudoun County has become a locality that increasingly captures retail sales. Strong population and income growth have led to an increase in the number of retail centers in Loudoun County during that period. That increase in retail centers both attracted consumers from other localities and reduced the amount of retail spending by Loudoun County residents elsewhere. Further, the addition of Dulles Town Center and Leesburg Corner Premium Outlets added to Loudoun County's position as a retail destination thereby increasing the amount of retail sales captured. In fact, the amount of retail sales captured has increased in Loudoun County for each of the years between 1989 and 2001. In 1989, the total value of retail sales capture was \$292.1 million, in 2001 dollars. That figure increased to \$792.8 million in 2001. The amount of retail sales captured in Loudoun County for each of the years between 1989 and 2001 can be seen in Figure 13 below.

Figure 13



As expected, the highly populated, suburban localities in the Washington Metro Area captured retail sales. In fact, the localities with the greatest retail capture, Fairfax, Montgomery and, Prince William Counties, were the most populous suburban localities and were near the center of the Washington Metro area. Those localities benefited from three factors. First, they were in a position to attract consumers for more rural jurisdictions with insufficient or inconvenient retail centers. Second, they were near the more central localities (the District of Columbia, Arlington, and Alexandria) and were able to compete with those localities for a large number of consumers. Finally, their retail sectors were sufficiently large to contain their own consumers to an extent greater than neighboring localities. Map 1 demonstrates the pattern of retail capture and leakage in the localities of the Washington Metro Area. As can be seen on Map 1 below, the localities that captured retail sales in 2001 are represented in red.

With some exceptions, most of the localities further from the center of the Washington Metro Area experienced retail sales leakage in 2001. Among the exceptions to that pattern were Frederick County, Culpeper County, and Spotsylvania County. Retail sales captured in Frederick County totaled \$782.4 million in 2001. It might have been expected that a locality that shared a border with the Baltimore Metro Area, such as Frederick County, would have captured retail sales in 2001 due to their unique position of being able to compete in two metro markets. The most likely explanation for Spotsylvania County experiencing retail capture in 2001 is its access to Interstate 95 and the suburbanization that has taken place from the Metro Washington Area because of that access. Localities that leaked retail sales in 2001 can be seen on Map 1 below represented in blue.

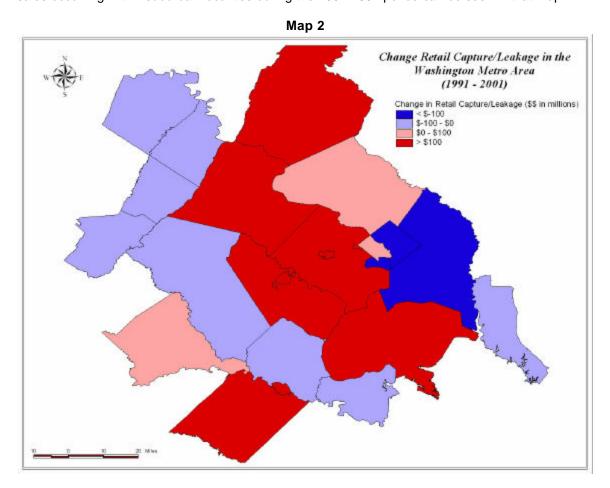


Determining which localities have increased the level of captured retail sales can easily be done by comparing total retail sales captured in 1991 with comparable figures for 2001. In some cases, a locality increased the level of retail sales captured during the period. Most notable among them is Prince William County. In Prince William County, total retail sales captured was \$933.3 million more in 2001 than in 1991, adjusted for inflation. Similarly Fairfax and Frederick Counties each increased the amount of retail sales captured by in excess of \$500 million during that period. Six other localities in the Washington Metro Area experienced both a positive retail capture in 2000 and experienced increasing retail capture throughout the 1990's. Those localities were Arlington, Charles, Culpeper, Loudoun, Montgomery and Spotsylvania Counties.

Other localities continued to capture retail sales during the last decade, but captured far less retail sales by the end of the decade than were experienced at the beginning of the decade. In other words, the level of retail sales captured declined during the 1990's. Most notable among them was Prince George's County. In 1991, the total amount of retail sales captured in Prince George's County was more than \$2.0 billion. By 2001, that figure had declined to \$921.7 million, adjusted for inflation, representing a decline of over \$1.1 billion in captured retail sales during the decade. Alexandria was also among those that continued to capture retail sales during the last decade, but experienced a decline in total retail sales captured during that period. Retail sales captured in Alexandria declined from \$463.3 million to \$279.1 between 1991 and 2001.

Some of the localities in the Washington Metro Area leaked retail sales in 1991 and the total retail sales leakage increased throughout the last decade. For example, in 1991, the District of Columbia experienced a retail leakage of slightly less than \$3.0 billion. In 2001, that figure had increased to almost \$4.0 billion. Eight other localities experienced retail leakage in 2000 and experienced an increasing level of leakage during the 1990's. Those localities were Berkeley,

Calvert, Clarke, King George, Jefferson, Fauquier, Stafford, and Warren Counties. Change in retail sales capture and leakage for all the localities in the Washington Metro Area can be seen in Map 2. Localities with a decreasing level of retail sales capture (or increasing levels of leakage) during the last decade are represented in blue. The localities that increased their level of retail sales capture are represented in red. The pattern of an increasing amount of captured retail sales occurring within suburban localities during the 1991-2001 period can be seen in that map.



#### Retail Capture/Leakage as Percent of Total Retail Sales

Measuring a locality's retail capture or leakage relative to its retail sales is an indicator of the degree to which a locality depends on consumers from outside of their locality when generating retail sales. This measure is of particular use when making comparisons across localities because it controls for the size of a locality's retail sector. To calculate this measure, total retail sales capture (or leakage) is divided by total retail sales. A locality with a positive ratio is capturing retail sales. A negative ratio implies that a locality is leaking retail sales. What is more interesting is the magnitude of that ratio. For example, as was seen in Figure 8 above, Fairfax County has the largest total amount of captured retail sales in the Washington Metro Area. This is not surprising given its large size and high number of retails centers. What can be learned by calculating the ratio of retail sales captured to total retail sales is that 25 percent of all retail sales in 2001 in Fairfax County were captured from consumers not residing in that county. This measure has been calculated for all the localities in the Washington Metro Area and is displayed in Figure 14 below.

As can be seen in the figure, the horizontal line represents the share of retail sales that were captured in the Washington Metro Area in 2001. In 2001, 13.6 percent of all retail sales in the

Washington Metro Area were captured from localities outside the Washington Metro Area. Put in other terms, without capturing retail sales from tourists and visitors, the retail sector in the Washington Metro Area would have been approximately 13 percent smaller than it actually was in 2001. Among individual localities, Spotsylvania leads all localities in the Washington Metro Area in the degree to which it captures retail sales. In fact, retail sales captured from outside localities were responsible for 45 percent of Spotsylvania's total retail sales in 2001. Prince William County is second among localities in the Washington Metro Area. It is not surprising to see Spotsylvania and Prince William lead in this metric. They both have a strong retail presence and a location near the I-95 corridor. Loudoun County is fourth among the localities of the Washington Metro Area. Captured retail sales comprised approximately 37 percent of the total retail sales in Loudoun County in 2001.

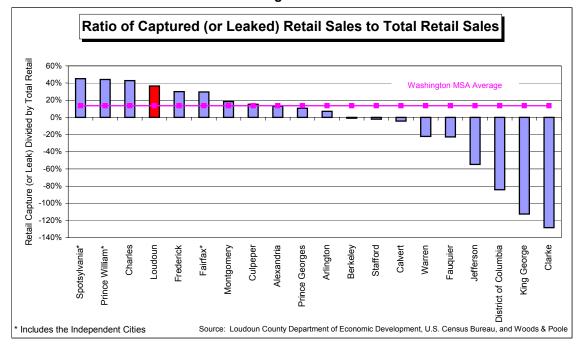


Figure 14

#### **Retail Sales Capture and Leakage by Category**

Retail sales capture and leakage can also be calculated by category. This method also uses data from the 1997 Economic Census and has been performed for the Washington Metro Area and all the localities within the Washington Metro Area. Again, 1997 data is dated, however, this data source is the most recent data available for retail sales by category that is consistent for all the geographies included in this study.

Considering that the Washington Metro Area experienced retail sales capture in 1997, it would be expected that the Washington Metro Area would also capture retail sales in many of the retail categories explored in this study. In fact, the Washington Metro Area captured retail sales in nine of the eleven categories. In the Washington Metro Area, the amount of retail sales captured was greatest in food & beverage stores. In 1997, the Washington Metro Area captured more than \$2.3 billion in retail sales in food & beverage stores. It is important to note that food & beverage stores do not include restaurants, instead only retailers of food and beverage products. Typical

\_

<sup>&</sup>lt;sup>9</sup> As reported earlier, there are actually twelve categories. Data for general merchandise stores and miscellaneous retail stores were combined into one category. This allowed comparison with many of the localities within the Washington Metro are for which those data were suppressed. Total retail capture/leakage may not equal previously reported figures due to differences in time and data sources.

retailers in this category include grocery stores, supermarkets, convenience stores, meat markets and liquor stores. The Washington Metro Area also captured a large amount of retail sales in the motor vehicle & parts category. In 1997, total retail sales captured by the Washington Metro Area in the motor vehicles & parts category was over \$1.5 billion. Examples of retailers that would be contained in this category are new and used car, motorcycle and boat dealers, and automotive parts, and tire dealers. Other categories in which the Washington Metro Area captured retail sales were clothing & clothing accessories stores (\$1.3 billion), electronics & appliance stores (\$911 million) and sporting goods, hobby, book & music stores (\$648 million).

The Washington Metro Area leaked retail sales in only two categories in 1997. The largest among those was nonretailers, where total retail sales leakage in 1997 was \$1.02 billion. Examples of retail sales contained within this category include electronic shopping, paper and electronic catalog sales, and mail order sales. Total retail sales leakage in gasoline stations was \$69.8 million for the Washington Metro Area in that year. Total retail sales capture and leakage by category for the Washington Metro Area can be seen in Figure 15.

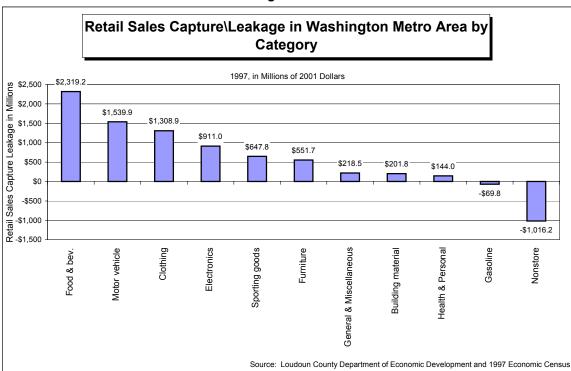


Figure 15

Further demonstrating Loudoun County's position as a retail destination is that fact that Loudoun County captured retail sales in every category with the exception of nonstore retailers. The category in which Loudoun County captured the most retail sales was general merchandise stores and miscellaneous stores. In 1997, the total amount of retail captured in this category was \$148.6 million. One component of this category is national chain department stores, however this category also includes discount stores, warehouse clubs, florists, office supplies, and gift and pet stores, among others. Similar to the Washington Metro Area, food and beverage stores were a source of captured retail sales in Loudoun County in 1997. In that year, Loudoun County captured \$124.9 million in retail sales in the food and beverage category. Total retail sales captured in building materials & garden equipment & supplies dealers totaled \$59.8 million in 1997. These retailers include home centers, hardware stores, lumberyards, and nurseries, for example. Total retail sales leakage in nonretail stores in Loudoun County totaled \$18.7 million in 1997. Leaking retail sales in nonretail category was common among the localities of the

Washington Metro Area in 1997. Only three of the twenty localities in the Washington Metro Area captured retail sales in this category in that year. The amount of retail sales captured and leaked by category for all the localities in the Washington Metro Area can be seen in Appendix 4. The total amount of retail sales captured and leaked by category for Loudoun County can be seen in Figure 16.

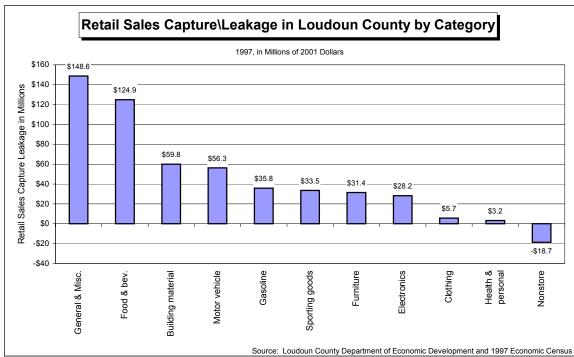


Figure 16

#### Retail Capture/Leakage by Category as Percent of Total Retail Sales

Previously, the Washington Metro Area's retail capture or leakage relative to its retail sales was calculated and reported as an indicator of the degree to which a locality depends on consumers from outside of their locality when generating retail sales. That figure was also reported for each of the localities in the Washington Metro Area. To restate, this measure was used when making comparisons across localities because it controlled for the size of a locality's retail sector and was calculated by dividing the retail sales captured (or leaked) by a particular category with the total retail sales in that category for that locality.

That measure has been calculated for all the categories for each of the localities in the Washington Metro Area. Those comparisons will be made here for Loudoun County and the Washington Metro Area only and are displayed on Figure 17 below. <sup>10</sup> Ratios between retail sales capture (or leakage) and total retail sales for all the retail categories for each of the localities in the Washington Metro Area can be found in Appendix 4.

As can be seen in that figure, both the Washington Metro Area and Loudoun County captured retail sales in most categories in 1997. Further, both the Washington Metro Area and Loudoun County experienced a high degree of retail sales capture relative to total sales in the categories of electronics & appliances, sporting goods, hobby, book, & music stores, and furniture & home furnishing stores. Also, relative to total retail sales, both the Washington Metro Area and Loudoun County experienced significant retail sales leakage in nonstore retail sales.

<sup>1</sup> 

Data for miscellaneous retailers and general merchandise stores were combined on that figure due to data suppression.

Retail Sales Captured (or Leaked) Divided by total Retail Sales Ratio of Retail Sales Capture/Leakage Divided by Toal Retail Sales by in Loudoun Couty and the Washington Metro Area 40% 20% 0% -20% -40% ■ Loudoun County -60% ■ Washington Metro Area -80% -100% -120% Motor vehicle Miscellaneous Electronics Nonstore Sporting goods Clothing Furniture personal ding material Sasoline Food & bev. General & Misc.

Figure 17

More interesting is the observation that in some categories, the level of Loudoun County's retail sales captured or leaked relative to total retail sales differed from the Washington Metro Area in 1997. Specifically, the measure for clothing and clothing accessories in Loudoun County was significantly lower than the comparable figure for the Washington Metro Area. While total retail sales captured comprised 36 percent of total retail sales in the Washington Metro Area, that figure was only 10 percent in Loudoun County. This is the only category in which Loudoun County under performed the Washington Metro Area, perhaps suggesting that there may have been a need for additional retail stores in this category in Loudoun County in 1997.

Source: Loudoun County Department of Economic Development and 1997 Economic Census

Conversely, retail sales captured in Loudoun County in building materials, general merchandise and gasoline stations outperformed the Washington Metro Area. In Loudoun County, total retail sales captured in building material & garden equipment & supplies dealers comprised 41.7 percent of total retail sales in that category in 1997. In general merchandise stores and miscellaneous store retailers, total retail sales captured comprised 49.7 percent of total retail sales in that category. In gasoline stations, total retail sales captured comprised 32.9 percent of total retail sales in that category. Comparable figures for the Washington Metro Area were 5.0 percent, 3.1 percent, and -2.1 percent respectively in that year. Considering the need for large lots when constructing stores for building material & garden equipment & supplies dealers and general merchandise, it is not surprising to learn that suburban localities such as Loudoun County captured a large amount of retail sales relative to total retail sales in those categories.

## Section IV Comparing the Supply of Retail Space with Projected Demand in Loudoun County

Conducting a projection of retail space demanded in the future enables economic development officials and other decision makers to determine whether sufficient space has been allocated for

that purpose. These projections have been performed for Loudoun County for all the years between 2000 and 2020 and will be compared with existing and approved retail space below.

#### **Projecting Retail Supply**

Projecting the supply of retail space in Loudoun County was accomplished by performing three steps. First, the total amount of existing retail space was collected. Second, the total square footage of currently approved retail centers in Loudoun County was collected. Each of these figures was obtained from the Loudoun County Department of Economic Development. Finally, the total square footage of approved rezoning applications that were rezoned for a retail use was collected from the Loudoun County Department of Planning. Total retail space was then calculated by summing existing retail space, approved retail space, and the square footage of the rezoning applications for any application being changed to a retail use since 2001.

In 2001, there was 7,272,210 square feet of existing retail space in Loudoun County. Further, there was a total of 6,112,491 square feet of approved major retail space in Loudoun County in 2001. During 2001, there was a total of 27,726 square feet of space that was rezoned for a retail use. Therefore, the total supply of retail space in Loudoun County, including both existing and approved retail space, was 13,412,427 square feet.

#### **Projecting Retail Demand in Loudoun County**

The projected demand of total retail space in Loudoun County was based on the projected number of households in Loudoun County, the projected amount of retail square footage demanded per household, and the projected amount of retail sales captured as a percent of total retail sales in Loudoun County. The projected number of households in Loudoun County and the projected retail space per household demanded in Loudoun County were used to project the total retail space that would be demanded by residents of Loudoun County. The projected amount of retail sales captured as a percent of total retail sales was used to project the amount of retail space that would be demanded by persons residing outside of Loudoun County, but entering Loudoun County to make retail purchases.

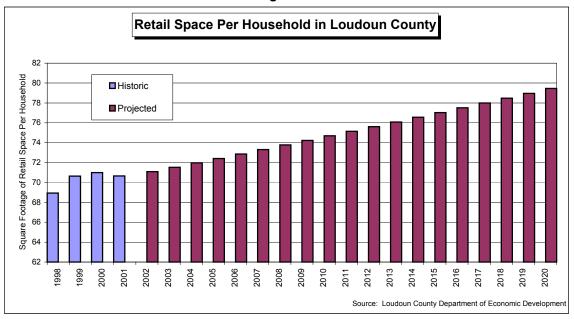
The projected number of households in Loudon County was obtained from Loudoun County's Department of Economic Development. That figure is projected to increase from 59,900 in 2000 to 139,611 by 2020. Those figures were generated as part of the Loudoun County Department of Economic Development's annual forecast.

The projections of retail space per household in Loudoun County were based on the historical relationship between retail space and households. First, retail space per household in Loudoun County was collected for the years 1998 to 2001. The average annual percent change in that data was then calculated. That growth rate was used to project retail space per household from 2002 to 2020. Based on that data, retail space per household in Loudoun County was projected to increase by 0.6 percent annually reaching 78.4 square feet per household in 2020. Admittedly, a short time series was used to project retail space per household, however, those projections are considered reasonable when compared to the average annual growth rate of 0.9 percent in retail space per household that has historically taken place in the U.S. between 1991 and 2001. Historic and projected retail space per household in Loudoun County is displayed in Figure 18 below. In that figure, historic retail space per household is displayed in blue while projections of retail space per household are displayed in red.

\_

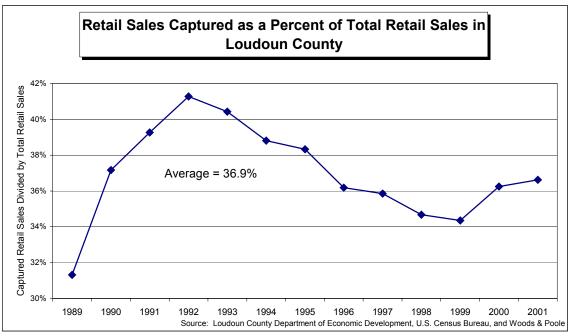
<sup>&</sup>lt;sup>11</sup> Total retail space reported here differs from the figure reported in Section II. This figure is representative of all retail space while the previous figure was representative of all space within a shopping center. Further, this figure is reported for 2001 while the previously reported figure was reported fro fourth quarter 2002.

Figure 18



Finally, it was required to project the amount of retail space demanded by captured retail sales in Loudoun County. This was determined by first estimating the percent of retail sales would be attributable to retail capture. The historic relationship between captured retail sales and total retail sales in Loudoun County is unclear. In fact, that ratio does not appear to be trending upward or downward over the period for which the data is available. For that reason, it was assumed that the retail sales in Loudoun County would comprise 36.9 percent of total retail sales through 2020, the average ratio for the period 1989 to 2001. Retail sales captured as a percent of total retail sales in Loudoun County is displayed in Figure 19.

Figure 19



Having made the assumption that captured retail sales would comprise 36.9 percent of total retail sales, it was then assumed that those sales would require an additional 36.9 percent of retail space in Loudoun County. In other words, it was assumed that the ratio between households and retail sales for households in Loudoun County was the same as the ratio between households and retail sales for households outside of Loudoun County.

Having obtained the projected number of households in Loudoun County, the projected retail space demanded per household in Loudoun County, and the projected amount of retail space required to meet the demand from captured retail sales, it is possible to project total retail space demanded in Loudoun County for the period 2000 to 2020. These figures can be seen in Table 3 below. First, the projected number of households was multiplied by the projected retail space per household in Loudoun County to determine the amount of retail space needed to meet the demands of the resident population. In 2000, that figure was 4,252,665 square feet and was the product of 59,900 households and 71.0 square feet of retail space per household. Next, it was assumed that an additional 36.9 percent of retail space would be demanded based on the relationship between captured retail sales and total retail space was demanded due to captured retail sales. Summing those components, it was assumed that in 2000, an estimated total retail space of 6,739,564 square feet of retail space was demanded in Loudoun County.

**Table 3**Projected Retail Space Demanded in Loudoun County

|      |            |              |                      | Retail Sales     | Additional Datail                         |                 |
|------|------------|--------------|----------------------|------------------|---|-----------------|
|      |            | Retail Space | Retail Space to Meet | Captured as a    | <u>Additional Retail</u><br>Space to Meet | Total Retail    |
|      |            | Per Person   | Demand of Resident   | Percent of Total | Demand of Captured                        | Space           |
|      | Households | Household    | Households           | Retail Sales     | Retail Sales                              | <u>Demanded</u> |
| 2000 | 59,900     | 71.0         | 4,252,665            | 36.9%            | 2,486,899                                 | 6,739,564       |
| 2001 | 65,357     | 70.6         | 4,617,400            | 36.9%            | 2,700,191                                 | 7,317,591       |
| 2002 | 69,400     | 71.1         | 4,933,388            | 36.9%            | 2,884,977                                 | 7,818,365       |
| 2003 | 74,703     | 71.5         | 5,343,312            | 36.9%            | 3,124,695                                 | 8,468,007       |
| 2004 | 80,062     | 72.0         | 5,762,145            | 36.9%            | 3,369,622                                 | 9,131,767       |
| 2005 | 84,852     | 72.4         | 6,144,677            | 36.9%            | 3,593,321                                 | 9,737,998       |
| 2006 | 89,540     | 72.9         | 6,524,404            | 36.9%            | 3,815,380                                 | 10,339,784      |
| 2007 | 93,854     | 73.3         | 6,881,107            | 36.9%            | 4,023,975                                 | 10,905,082      |
| 2008 | 98,079     | 73.8         | 7,235,441            | 36.9%            | 4,231,185                                 | 11,466,627      |
| 2009 | 102,318    | 74.2         | 7,594,983            | 36.9%            | 4,441,440                                 | 12,036,423      |
| 2010 | 106,574    | 74.7         | 7,959,927            | 36.9%            | 4,654,854                                 | 12,614,781      |
| 2011 | 110,804    | 75.2         | 8,327,127            | 36.9%            | 4,869,588                                 | 13,196,715      |
| 2012 | 114,460    | 75.6         | 8,655,239            | 36.9%            | 5,061,463                                 | 13,716,702      |
| 2013 | 117,847    | 76.1         | 8,966,602            | 36.9%            | 5,243,544                                 | 14,210,146      |
| 2014 | 121,202    | 76.6         | 9,278,968            | 36.9%            | 5,426,211                                 | 14,705,179      |
| 2015 | 124,556    | 77.0         | 9,594,861            | 36.9%            | 5,610,941                                 | 15,205,802      |
| 2016 | 127,910    | 77.5         | 9,914,314            | 36.9%            | 5,797,753                                 | 15,712,067      |
| 2017 | 131,107    | 78.0         | 10,225,123           | 36.9%            | 5,979,510                                 | 16,204,633      |
| 2018 | 134,120    | 78.5         | 10,524,905           | 36.9%            | 6,154,817                                 | 16,679,722      |
| 2019 | 136,956    | 79.0         | 10,814,120           | 36.9%            | 6,323,946                                 | 17,138,066      |
| 2020 | 139,611    | 79.4         | 11,092,074           | 36.9%            | 6,486,490                                 | 17,578,565      |

Source: Loudoun County Department of Economic Development

As can be seen in the table, retail demand is projected to increase from 6,739,564 square feet in 2000 to 17,578,565 square feet by 2020. That represents a growth rate of 160.8 percent during the entire period from 2000 to 2020. During the same period, the projected households growth rate in Loudoun County is 130.8 percent. A projected growth rate in total retail space demanded that is greater than the growth rate for households in Loudoun County is explained by an

-

<sup>&</sup>lt;sup>12</sup> Error is due to rounding.

increasing amount of retail space per household and an increasing level of retail sales captured from households outside Loudoun County.

#### **Comparison of Supply and Demand**

Once projected retail demand and retail supply in Loudoun County have been estimated, it is possible to compare those figures and make some general observations regarding possible future surpluses and shortages in retail space. More specifically, it allows calculations to be made to determine in what year the amount of currently approved retail space will become insufficient.

In 2001, the total existing retail space was 7,272,210 square feet. The amount of space approved for construction in major retail centers was 6,112,491 square feet. Finally, the space rezoned for retail use between 2001 and the time this study was written was 27,726 square feet. Therefore, in that year, the total supply of retail space was 13,412,427 square feet.

Given current trends, it appears that the amount of existing and approved retail space will be sufficient to meet demand of both Loudoun residents and visitors until 2012. However, it is important to note that changes in retail sales per household, changes in share of total retail sales captured from other localities and changes in other economic and demographic variables may effect this projection. A comparison between the supply and demand of retail space in Loudoun County is displayed on Figure 20.

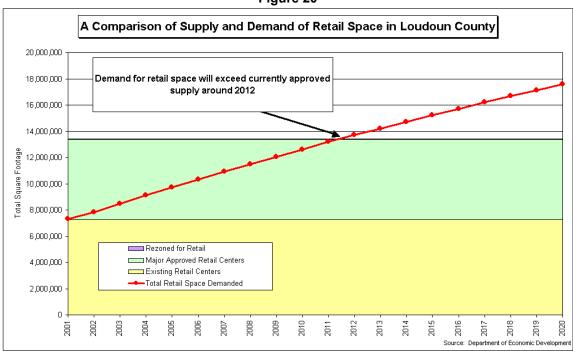


Figure 20

On that figure the total existing retail space in 2001 can be seen in yellow. The total amount of retail space approved but not currently built can be seen in green. The amount of space rezoned for retail use between 2001 and the time of writing can be seen in the figure in purple (the legend displays that area as purple, however, the amount of space rezoned to retail may be too small to observe on the figure). The red line represents the total projected demand for retail space in Loudoun County. As can be seen in that figure, it has been estimated that the total amount of retail space demanded in Loudoun County will exceed the amount of retail space supplied, including existing and approved space as well as rezoned space, sometime around 2012.

#### Section V Conclusions

This study was conducted for several reasons. First, general economic trends including retail employment and retail sales in the U.S., the Washington Metro Area, and Loudoun County were reported. Second, trends in retail space in the U.S. and Loudoun County were reported including the number, size, and composition of retail centers. While conducting that research, a list of the retail centers in Loudoun County, their sizes, contact information, a map of their location, and the stores they contain was collected and has been reported in Appendix 2. Third, this report compared retail sales flows from one locality or region to another, also referred to in this study as retail sales capture and leakage. Finally, this report compared projected retail demand in Loudoun County with projected retail supply to determine whether there will be a shortage or surplus of retail space in Loudoun County in the future.

Retail employment has increased in most all years in the U.S., the Washington Metro Area, and Loudoun County with the exception of some of the years containing recessions. In fact, for the entire period between 1970 and 2000, total retail employment increased by 103.3 percent in the U.S., 113.0 percent in the Washington Metro Area, and 778.3 percent in Loudoun County. Growth in retail employment was driven by an increase in retail sales. The inflation adjusted annual average change in retail sales in the U.S. was 2.6 percent annually for each of the years between 1969 and 2001. The comparable figure for the Washington Metro Area was 4.5 percent and for Loudoun County was 32.7 percent. Inflation adjusted retail sales growth has been primarily driven by population growth and household income growth. The long-term trend of increasing retail employment and sales is expected continue through the next decade in the U.S., the Washington Metro Area, and Loudoun County.

Vacancy rates for retail centers in Loudoun County are only available for the years 1993, 1995 and 2001. It appears that retail center vacancy rates have been steadily declining during that period. In 1993, the retail center vacancy rate was 13.1 percent. In 1995, that rate declined to 9.5 percent. In fourth quarter 2002, the retail vacancy rate in Loudoun County was 3.3 percent. In that period, the Route 7 West subarea had the highest vacancy rates in Loudoun County with a total of 10.4 percent of all retail center space being vacant. Second among Loudoun County's subareas in vacancy rates was the Sterling Subarea with a vacancy rate of 5.1 percent. All other subareas for which retail center vacancy rates were calculated were below 2.0 percent. In Ashburn, that rate was 1.8 percent. In Leesburg, the vacancy rate was 1.7 percent. Retail center vacancy rates were 1.2 percent and 0.0 percent in Potomac and Dulles, respectively.

Between 1989 and 2001, the Washington Metro Area captured retail sales. In fact, in 2001, it is estimated that the region captured approximately \$8.5 billion dollars in retail sales. However, the level at which the Washington Metro Area captured retail sales declined during the past decade. In 1989, total retail sales captured in the Washington Metro Area was \$11.1 billion, in 2001 dollars. The decline in the amount of retail sale captured in the Washington Metro Area appears to have stabilized in the last seven years. It is expected that the Washington Metro Area will continue to capture retail sales given its urban characteristics and position as a tourism destination. Although the trend of decreasing retail sales captured in the Washington Metro Area appeared to have stabilized in the last seven years, that trend should continue to be observed.

In Loudoun County retail sales captured from other localities were an increasing part of total retail sales. In 1989, the total value of retail sales captured in Loudoun County was \$292.1 million, in 2001 dollars. That figure increased to \$792.8 million in 2001. Given Loudoun's suburban location, rapidly increasing population, and increasing importance in the region's retail and tourism sectors, the amount of retail sales captured from other localities in Loudoun County is expected to increase.

In 1997, the ratio between retail sales captured and total retail sales in Loudoun County differed significantly from the Washington Metro Area in only a few retail categories. Specifically, retail

sales captured in Loudoun County as a percent of total retail sales in building materials, general merchandise and gasoline stations outperformed the Washington Metro Area. Conversely, retail sales captured as a percent of total retail sales in clothing and clothing accessories in Loudoun County was significantly lower than the Washington Metro Area. In fact, clothing and clothing accessories was the only category where that was the case, perhaps suggesting that there may have been a need for additional retail stores in this category in that year.

The projected demand of total retail space in Loudoun County was based on the projected number of households in Loudoun County, the projected amount of retail square footage demanded per household, and an estimate of retail space demanded by those who leave their own locality to make retail purchases in Loudoun County. Total retail space demanded in Loudoun County is projected to increase from 6,739,564 square feet in 2000 to 17,578,565 square feet by 2020. The supply of retail space was calculated by adding existing retail space in 2001, approved retail space in 2001, and the amount of space rezoned for retail use since 2001. It is estimated that the total supply of existing and approved retail space in Loudoun County of 14,645,320 square feet is sufficient to meet demanded retail space until 2012. That estimate will likely change if retail sales per household differed from expected levels or if the amount of retail sales captured relative to total retail sales changed in Loudoun County.

## Appendix 1 A Description of the Retail Sales Categories

#### Motor Vehicle and Parts Dealers

Industries in the motor vehicle and parts dealers subsector retail motor vehicle and parts merchandise from fixed point-of-sale locations. Establishments in this subsector typically operate from a showroom and/or an open lot where the vehicles are on display. The display of vehicles and the related parts require little by way of display equipment. The personnel generally include both the sales and sales support staff familiar with the requirements for registering and financing a vehicle as well as a staff of parts experts and mechanics trained to provide repair and maintenance services for the vehicles. Specific industries have been included in this subsector to identify the type of vehicle being retailed.

Sales of capital or durable nonconsumer goods, such as medium and heavy-duty trucks, are always included in wholesale trade. These goods are virtually never sold through retail methods.

Examples of this retail category include new car dealers, used car dealers, other motor vehicle dealers, recreational vehicle dealers, motorcycle, boat, & other motor vehicle dealers, all other motor vehicle dealers, and automotive parts, accessories, & tire stores.

#### Furniture and Home Furnishings Stores

Industries in the furniture and home furnishings stores subsector retail new furniture and home furnishings merchandise from fixed point-of-sale locations. Establishments in this subsector usually operate from showrooms and have substantial areas for the presentation of their products. Many offer interior decorating services in addition to the sale of products.

Examples of this retail category include furniture stores, home furnishings stores, floor-covering stores, other home furnishings stores, window treatment stores, and all other home furnishings stores.

#### Electronics and Appliance Stores

Industries in the electronics and appliance stores subsector retail new electronics and appliance merchandise from point-of-sale locations. Establishments in this subsector often operate from locations that have special provisions for floor displays requiring special electrical capacity to accommodate the proper demonstration of the products. The staff includes sales personnel knowledgeable in the characteristics and warranties of the line of goods retailed and may also include trained repair persons to handle the maintenance and repair of the electronic equipment and appliances. The classifications within this subsector are made principally on the type of product and knowledge required to operate each type of store.

Examples of this retail category include appliance, television, & other electronics stores, household appliance stores, radio, television, & other electronics stores, computer & software stores, computer stores (custom assembly), other computer stores, prepackaged software stores, and camera & photographic supplies stores.

#### Building Material and Garden Equipment and Supplies Dealers

Industries in the building material and garden equipment and supplies dealers subsector retail new building material and garden equipment and supplies merchandise from fixed point-of-sale locations. Establishments in this subsector have display equipment designed to handle lumber and related products and garden equipment and supplies that may be kept either indoors or outdoors under covered areas. The staff is usually knowledgeable in the use of the specific products being retailed in the construction, repair, and maintenance of the home and associated grounds.

Examples of this retail category include building material & supplies dealers, home centers, paint & wallpaper stores, hardware stores, other building material dealers, retail lumber yards, all other

building material dealers, lawn & garden equipment & supplies stores, outdoor power equipment stores, and nursery & garden centers.

#### Food and Beverage Stores

Industries in the food and beverage stores subsector usually retail food and beverage merchandise from fixed point-of-sale locations. Establishments in this subsector have special equipment (e.g., freezers, refrigerated display cases, refrigerators) for displaying food and beverage goods. They have staff trained in the processing of food products to guarantee the proper storage and sanitary conditions required by regulatory authority.

Examples of this retail category include food & beverage stores, grocery stores, supermarkets & other grocery stores, convenience stores, specialty food stores, meat markets, fish & seafood markets, fruit & vegetable markets, other specialty food stores, baked goods stores, confectionery & nut stores, all other specialty food stores, and beer, wine, & liquor stores.

#### Health and Personal Care Stores

Industries in the health and personal care stores subsector retail health and personal care merchandise from fixed point-of-sale locations. Establishments in this subsector are characterized principally by the products they retail, and some health and personal care stores may have specialized staff trained in dealing with the products. Staff may include pharmacists, opticians, and other professionals engaged in retailing, advising customers, and/or fitting the product sold to the customer's needs.

Examples of this retail category include health & personal care stores, pharmacies & drug stores, proprietary stores, cosmetics, beauty supplies, & perfume stores, optical goods stores, other health & personal care stores, food (health) supplement stores, and all other health & personal care stores.

#### **Gasoline Stations**

Industries in the gasoline stations subsector group establishments retail automotive fuels (e.g., gasoline, diesel fuel, gasohol) and automotive oils and retail these products in combination with convenience store items. These establishments have specialized equipment for the storage and dispensing of automotive fuels.

Examples of this retail category include gasoline stations and gasoline stations with convenience stores.

#### Clothing and Clothing Accessories Stores

Industries in the clothing and clothing accessories stores subsector retailing new clothing and clothing accessories merchandise from fixed point-of-sale locations. Establishments in this subsector have similar display equipment and staff that is knowledgeable regarding fashion trends and the proper match of styles, colors, and combinations of clothing and accessories to the characteristics and tastes of the customer.

Examples of this retail category include clothing stores, men's clothing stores, women's clothing stores, children's & infants' clothing stores, family clothing stores, clothing accessories stores, other clothing stores, other clothing stores, shoe stores, men's shoe stores, women's shoe stores, children's & juveniles' shoe stores, family shoe stores, athletic footwear stores, jewelry stores, and luggage & leather goods stores.

#### Sporting Goods, Hobby, Book, and Music Stores

Industries in the sporting goods, hobby, book, and music stores subsector are engaged in retailing and providing expertise on use of sporting equipment or other specific leisure activities, such as needlework and musical instruments. Bookstores are also included in this subsector.

Examples of this retail category include general-line sporting goods stores, specialty-line sporting goods stores, hobby, toy, & game stores, sewing, needlework, & piece goods stores, musical instrument & supplies stores, book, periodical, & music stores, general, specialty book stores, college book stores, news dealers & newsstands, and prerecorded tape, compact disc, & record stores.

#### **General Merchandise Stores**

Industries in the general merchandise stores subsector retail new general merchandise from fixed point-of-sale locations. Establishments in this subsector are unique in that they have the equipment and staff capable of retailing a large variety of goods from a single location. This includes a variety of display equipment and staff trained to provide information on many lines of products.

Examples of this retail category include conventional department stores, discount or mass merchandising dept stores, national chain department stores, other general merchandise stores, warehouse clubs & superstores, all other general merchandise stores, variety stores, and catalog showrooms.

#### Miscellaneous Store Retailers

Industries in the miscellaneous store retailers subsector retail merchandise from fixed point-of-sale locations (except new or used motor vehicles and parts; new furniture and house furnishings; new appliances and electronic products; new building materials; and garden equipment and supplies; food and beverages; health and personal care goods; gasoline; new clothing and accessories; and new sporting goods, hobby goods, books, and music). Establishments in this subsector include stores with unique characteristics like florists, used merchandise stores, and pet and pet supply stores as well as other store retailers.

Examples of this retail category include florists, office supplies, stationery, & gift stores, gift, novelty, & souvenir stores, used merchandise stores, other miscellaneous store retailers, pet & pet supplies stores, art dealers, manufactured (mobile) home dealers, all other miscellaneous store retailers, and tobacco stores.

#### Nonstore Retailers

Industries in the nonstore retailers subsector retail merchandise using methods, such as the broadcasting of infomercials, the broadcasting and publishing of direct-response advertising, the publishing of paper and electronic catalogues, door-to-door solicitation, in-home demonstration, selling from portable stalls and distribution through vending machines. Establishments in this subsector include mail-order houses, vending machine operators, home delivery sales, door-to-door sales, party plan sales, electronic shopping, and sales through portable stalls (e.g., street vendors, except food). Establishments engaged in the direct sale (i.e., nonstore) of products, such as home heating oil dealers, newspaper delivery are included in this subsector.

Examples of this retail category include electronic shopping & mail-order houses, vending machine operators, direct selling establishments, heating oil dealers, and liquefied petroleum gas (bottled gas) dealers.

## Appendix 2 Vacancy Rates in Loudoun County

Retail Center Vacancies in Loudoun County Fourth Quarter 2002

| Property Name                   | <u>Subarea</u> | Square Footage | Vacant Space | Vacancy rate |
|---------------------------------|----------------|----------------|--------------|--------------|
| Ashburn Farm Town Center        | Ashburn        | 92,019         | 0            | 0.0%         |
| Ashburn Farm Village Center     | Ashburn        | 88,917         | 0            | 0.0%         |
| Ashburn Shopping Center*        | Ashburn        | 13,129         | na           | na           |
| Ashburn Town Square             | Ashburn        | 89,313         | 1,194        | 1.3%         |
| Ashburn Village Center          | Ashburn        | 110,000        | 6,250        | 5.7%         |
| Old Ashburn Square*             | Ashburn        | 31,600         | na           | na           |
| Battlefield Shopping Center     | Leesburg       | 297,600        | 2,976        | 1.0%         |
| Bellwood Commons                | Leesburg       | 62,000         | 0            | 0.0%         |
| Cascades Market Place           | Potomac        | 314,000        | 7,222        | 2.3%         |
| Cascades Plaza                  | Potomac        | 20,600         | 6,400        | 31.1%        |
| Catoctin Plaza                  | Leesburg       | 11,600         | 0            | 0.0%         |
| Cedar Lake Plaza                | Potomac        | 105,000        | 0            | 0.0%         |
| Church Plaza                    | Sterling       | 13,100         | 0            | 0.0%         |
| Countryside Commercial Center   | Potomac        | 127,148        | 0            | 0.0%         |
| Dulles 28 Center* **            | Ashburn        | na             | na           | na           |
| Dulles Square                   | Sterling       | 71,300         | 0            | 0.0%         |
| Dulles Town Center              | Sterling       | 1,400,000      | 140,000      | 10.0%        |
| Dulles Town Crossing            | Sterling       | 737,503        | 1,400        | 0.2%         |
| Enterprise Center               | Sterling       | 13,000         | 0            | 0.0%         |
| Fort Evans Plaza                | Leesburg       | 345,284        | 0            | 0.0%         |
| Fort Evans Shopping Center      | Leesburg       | 80,708         | 0            | 0.0%         |
| Great Falls Plaza               | Potomac        | 100,000        | 0            | 0.0%         |
| Industrial Court Plaza          | Leesburg       | 10,000         | 0            | 0.0%         |
| Leesburg Corner Premium Outlets | Leesburg       | 463,000        | 2,500        | 0.5%         |
| Leesburg Park                   | Leesburg       | 30,000         | 0            | 0.0%         |
| Leesburg Plaza                  | Leesburg       | 249,000        | 0            | 0.0%         |
| Leesburg Square                 | Leesburg       | 10,860         | 0            | 0.0%         |
| Loudoun Valley Shopping Center  | Route 7 West   | 68,000         | 25,000       | 36.8%        |
| Main Street*                    | Route 7 West   | 85,000         | 4,250        | 5.0%         |
| Maple Avenue Shops              | Route 7 West   | 10,200         | 0            | 0.0%         |
| Market Station                  | Leesburg       | 30,000         | 13,500       | 45.0%        |
| Mirror Ridge                    | Potomac        | 137,349        | 0            | 0.0%         |
| Parc City - Borders Plaza       | Potomac        | 64,000         | 0            | 0.0%         |
| Parc City - Heritage Plaza      | Potomac        | 11,000         | 0            | 0.0%         |
| Parc City - Regal Center        | Potomac        | 195,844        | 1,771        | 0.9%         |
| Park City Center                | Potomac        | 52,000         | 0            | 0.0%         |
| Potomac Falls                   | Potomac        | 16,023         | 0            | 0.0%         |
| Potomac Run                     | Potomac        | 488,650        | 4,100        | 0.8%         |

## Appendix 2 Vacancy Rates in Loudoun County

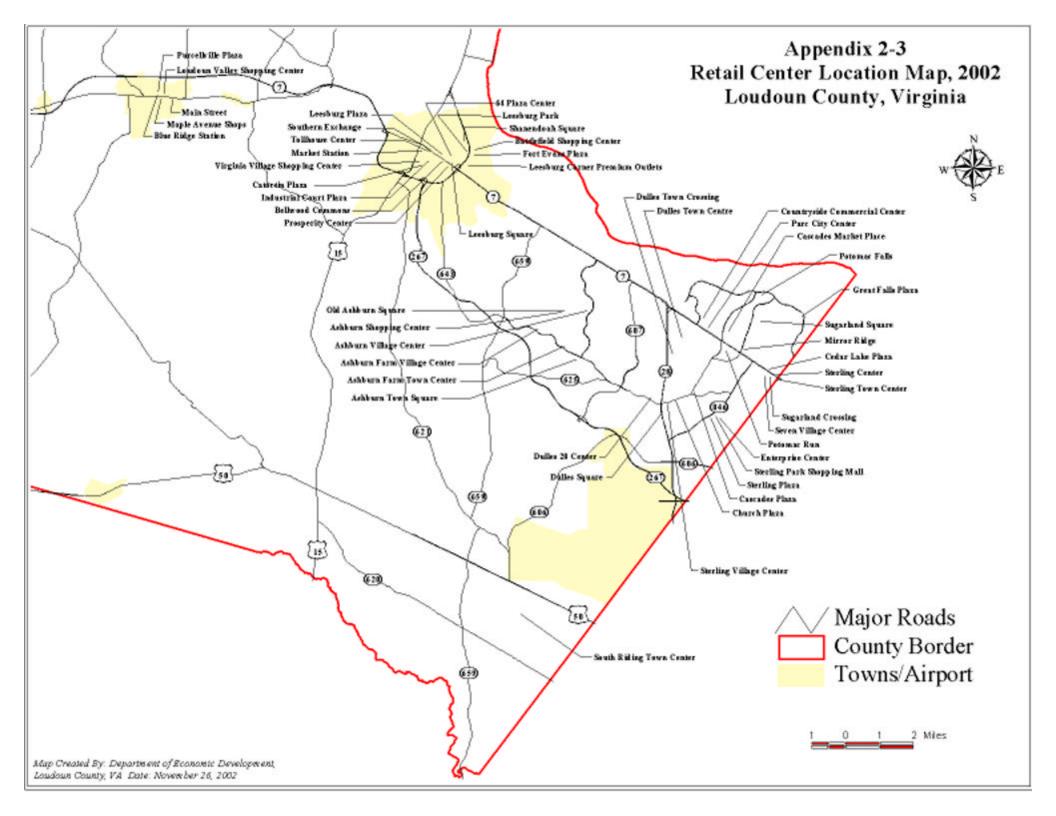
Retail Center Vacancies in Loudoun County Fourth Quarter 2002

| Property Name                                  | <u>Subarea</u> | Square Footage | Vacant Space | Vacancy rate |
|--|----------------|----------------|--------------|--------------|
| Prosperity Center                              | Leesburg       | 64,448         | 0            | 0.0%         |
| Purcellville Center at Blue Ridge Station      | Route 7 West   | 100,000        | 0            | 0.0%         |
| Purcellville Plaza                             | Route 7 West   | 18,000         | 0            | 0.0%         |
| Seven Village Center (Village Center on Seven) | Sterling       | 120,000        | 3,500        | 2.9%         |
| Shanendoah Square                              | Leesburg       | 127,000        | 11,000       | 8.7%         |
| South Riding Town Center                       | Dulles         | 80,000         | 0            | 0.0%         |
| Southern Exchange                              | Leesburg       | 12,000         | 1,000        | 8.3%         |
| Sterling Center                                | Potomac        | 12,000         | 0            | 0.0%         |
| Sterling Park Shopping Mall                    | Sterling       | 110,000        | 3,500        | 3.2%         |
| Sterling Plaza                                 | Sterling       | 153,276        | 1,600        | 1.0%         |
| Sterling Town Center (TownCenter)              | Sterling       | 186,448        | 0            | 0.0%         |
| Sterling Village Center                        | Sterling       | 24,357         | 3,806        | 15.6%        |
| Sugarland Crossing (Plaza)                     | Sterling       | 256,518        | 3,600        | 1.4%         |
| Sugarland Square                               | Potomac        | 9,205          | 0            | 0.0%         |
| Tollhouse Center                               | Leesburg       | 33,000         | 0            | 0.0%         |
| Virginia Village Shopping Center               | Leesburg       | 140,000        | 2,800        | 2.0%         |
| 64 Plaza Center                                | Leesburg       | 11,700         | 0            | 0.0%         |
| Total  | -              | 7,502,699      | 247,369      | 3.3%         |
| Subarea  |                | Square Footage | Vacant Space | Vacancy Rate |
| Ashburn  | Subarea Total  | 424,978        | 7,444        | 1.8%         |
| Leesburg                                       | Subarea Total  | 1,978,200      | 33,776       | 1.7%         |
| Route 7 West                                   | Subarea Total  | 281,200        | 29,250       | 10.4%        |
| Potomac  | Subarea Total  | 1,652,819      | 19,493       | 1.2%         |
| Sterling                                       | Subarea Total  | 3,085,502      | 157,406      | 5.1%         |
| Dulles   | Subarea Total  | 80,000         | 0            | 0.0%         |
| Total  | -              | 7,502,699      | 247,369      | 3.3%         |
|  |                |                |              |              |

<sup>\*</sup> Under Construction

Source: Loudoun County Department of Economic Development

<sup>\*\*</sup> Portions of Dulles 28 Center are under going demolition and construction and other portions are temporarily occupied. Its size and occupancy rate were difficult to measure, therefore, it was not reported.



#### Center Name and Information

#### Tenants

#### Ashburn Farm Town Center

Contact: Gene Douglas

Company Name: Regency Centers Phone Number: 888-468-9800 Square Footage: 92,019

Year Built: 2001

Classification: Neighborhood

Video Warehouse

Starbucks

Hershey Ice Cream

Domino's Optometry Farahi Dentistry

Nail Spa Cleaners Super Cuts Giant Parcel Plus

Easco Verizon Wireless

Ace Vacuums

Loudoun Chiropractic Orlando Hair Studio Suntan Shop Pottery You Paint the Little Gym Subway Treviso's

Treviso's Good Fortune Kwon's Karate

Nagoya Steak & Seafood

McDonalds First Virginia Bank

Exxon

#### Ashburn Farm Village Center

Contact: Don Brenits

Company Name: First Washington Realty

Phone Number: 301-907-7800 Square Footage: 88,917

Year Built: 1994

Classification: Neighborhood

Family Dentistry
Orthodontist

Carpet and Blinds Center Buffalo Wing Factory

Pizza Hut

Pedal Stop Ice Cream

Cleaners Hair Cuttery

Long & Fosters Realty

Virginia Nails Carlos hair Design Super Fresh Grocery

Good Year

Hong Kong Chinese Food

Exxon Wachovia

Center Name and Information

Tenants

#### Ashburn Shopping Center

Contact: na

Company Name: GR Realty Group Phone Number: 301-770-4510 Square Footage: 13,129

Year Built: Under Construction Classification: Convenience

#### Ashburn Town Square

Contact: John Zeaser

Company Name: Carl M. Freeman Retail LLC

Phone Number: 1-800-54-lease Square Footage: 89,313

Year Built: 1995

Classification: Neighborhood

**Under Construction** 

CVS Century 21 Dentist

> Williams Karate Ashburn Bagels Steps Dance The Tan Co.

Lavender Fields Florist Countryside Art Barber Shop GNC

Cingular

Manhattan Pizzeria Chin Chin Café Beau Nails Ashburn Cleaners

Food Lion Exxon Taco Bell

Chevy Chase Bank All First bank Jiffy Lube

#### Ashburn Village Center

Contact: Christine Norris Company Name: Sauls Center Phone Number: 301-986-6200 Square Footage: 110,000

Year Built: 1999

Classification: Community

Blockbuster Video House of Emperor Ashburn Medical

Starbucks

Ashburn Village Animal Hospital

Ashburn Café Family Dentistry

Ashburn Village Cleaners

Giant

Ashburn Village Chiropractic

VA ABC

Eclipse Salon & Day Spa

Snapshot Photo Dr. Allen Optometry

Papa John's

#### Center Name and Information

#### Tenants

The Old Yankee Framer Domani Restaurant Kirkpatrick's Irish Pub Mail Boxes Etc Banjarai Indian Cuisine Ashville Pediatrics Dairy Queen Medics USA

State Farm Insurance Ashburn Academy of Ballet Ashburn Barber Shop Sussex Gifts

Treats & Treasures Sun Shop The Gilded Lily Ashburn Pub Kim Tae Kwon Doe Vocelli Pizza Hair Cuttery Subway

Ashburn Tire & Service

Kindercare Burger King Exxon Circle K

Ashburn Nails McDonalds

Chevy Chase Bank

#### Old Ashburn Square

Contact: Phillip Mitchell

Company Name: Mitchell Companies Phone Number: 301-681-7322

Square Footage: 31,600 Year Built: Under Construction Classification: Convenience

#### **Under Construction**

#### Battlefield Shopping Center

Contact: Scott Specter

Company Name: Greenbaum and Rose Associates

Phone Number: 703-779-2398 Square Footage: 297,600

Year Built: 1991

Classification: Destination

Michael's Stein Mart Ross

Leesburg Golf McCormick Paint Suntan Shop Baer Mattress Den Lido's Pizza

#### Center Name and Information

#### Tenants

Golden China

Roomstore Furniture

World Gym Fitness

White Elephant Consignment

**Total Pets** 

Sterling Appliance

Bird Feeder

DiLorenzo

Nature's Market

Mary's Barber

Piano Company

**Tuesday Morning** 

Pro Nails

Dr. Nelson Dentistry

Cleaners

Hancock Fabrics

**Shoppers Food Warehouse** 

Alpha Omega

Merle Norman Cosmetics David Oakley Karate Ruby Tuesdays

Sun Trust Bank

Mobil

Kohl's (Across Street)

#### **Bellwood Commons**

Contact: Heather Hardman

Company Name: Vaaler Real Estate Phone Number: 703-771-1162 Square Footage: 62,000

Year Built: 1988

Classification: Neighborhood

Dunkin Donuts U.S. Tae Kwon Do Baskins Robbins Saddle Shop Severn Mortgage Prestige Cleaners

Creative Framing

Mailbox Etc.

Loudoun Learning -Homeschool supplies

Deli South Papa John's

Time Traveler Collectibles

Salvation Army Mercado Latino

Fink Family Chiropractics

Sign-a-rama

Party

Loudoun Physical Therapy

Shenandoah Photo Robert Bryce Dentistry Mr. Udo's Flowers Enterprise Rent-a-Car

Profit Ski & Skate

#### Center Name and Information

#### Tenants

#### Pardo Real Estate

#### Cascades Market Place

Contact: Gary Maufer

Company Name: GFS Realty Phone Number: 3014-341-4872 Square Footage: 314,000

Year Built: 1994

Classification: Destination

Home Depot Hallmark Staples Pier 1

Sports Authority

Town Center Chiropractic Famous Dave's BBQ Ruocco Family Dentistry Bungalow Billiards Coconuts China King Corner Bakery

Boston Market

BBQ Country Jamboree

Dairy Queen Cingular Tailor Shop Starbucks

Finest Art & Framing

Blockbuster Parcel Plus Giant Marshall's Linen & Things Zany Brainy Kool Klips

My Home Interiors Cargo Furniture Chevy Chase Bank Lady of America Baja Fresh Mojo Photo Voyager Travel Cleaners GNC

Hair Cuttery Ruby Tuesday's McDonalds Circle K

Center Name and Information

Tenants

Cascades Plaza

Company Name: Advanced Proportion Limited

Company Name: Advanced Properties Limited Phone Number: 703-971-7800

Square Footage: 20,600

2002

Catoctin Plaza

Classification: Convenience

Penny Pinchers Convenience

Spice Bazaar

Virginia Nails

Kings Buffet

Tan Diligence

DeeDee Cutlery

Subway

Company Name: na Just J Studios

Phone Number: na Subway
Square Footage: 11,600 Toy-Go-Round

Year Built: 1983 Village Lanes Bowling Classification: Convenience

Cedar Lake Plaza

Contact: na

Contact: Kelly Hagedore Food Lion
Company Name: Zimmer Development Corp. Maytag

Phone Number: 910-763-4669 Commonwealth Cleaners

Square Footage: 105,000 Carpet USA
Year Built: 1999 Tup Tim Thai

Year Built: 1999 Tup Tim Thai Classification: Neighborhood T-Nails

The Big Screen Store Health Way Natural Foods

> Music and Arts Subway

Cedar Lake Cleaners
Good Samaritan Thrift Shop

Raanstaad Windows
O'Haira's Salon

**IHOP** 

**Eckerd Drugs** 

Greater Atlantic Bank

Church Plaza

Contact: Pete Hutchinson

Company Name: Vaaler Real Estate Church Road Dry Cleaners
Phone Number: 703-891-2600 Yahoo Food Market

Square Footage: 13,100 Miracle Nails & Spa Year Built: 1987 Oriental Express Classification: Convenience Wild Sqae Café

Sterling Family Chirpractic

Cut-n-Up Deli

#### Center Name and Information

#### Tenants

#### Countryside Commercial Center

Contact: Janet Amiryar

Company Name: Regis Property Management

Phone Number: 703-450-5721 Square Footage: 127,148

Year Built: 1986

Classification: Neighborhood

Safeway

Mattress Traditions Masters Tuxedo Mail Center

American Kendo Karate Encore Studio of Dance American Décor Center

Hairport Los Toltecos Mo's Restaurant paintball Pro Shop

Countryside Shoe & Leather

VA ABC

Hunter Mill Deli

CVS

Countryside florist Andy's Comics

Kobe's Japanese Steakhouse

Countryside Cleaners Silver Lining Scrapbook

Café jasmine Countryside Pizza

7-11

Countryside Animal Clinic

La Petit Academy Sun Trust Bank Wendy's McDonalds

Mobil Circle K

**Embassy Auto Wash** 

Countryside Children's Center

#### **Dulles 28 Center**

Contact: Mark Hessinger Company Name: Lerner Corp. Phone Number: 703-406-0800

Square Footage: na

Year Built: Under Construction Classification: Destination

Wegman's Burger King Car Max

#### Center Name and Information

Tenants

#### **Dulles Square**

Contact: Pete Hutchinson

Company Name: Vaaler Real Estate Phone Number: 703-771-1162 Square Footage: 71,300

Year Built: 1989

Classification: Specialty

#### **Dulles Town Center**

Contact: William Winterburn Company Name: Lerner Enterprises Phone Number: 301-984-1500 Square Footage: 1,400,000

Year Built: 2000

Classification: Destination

**Sterling Carpet** 

Emilio's

World Gym Fitness Center

Belford Furniture Leather Plus the Little Gym

Bristles & Shears Salon

Abercrombie & Fitch Abercrombie Kids

Adelphia
Aeropostale
After Thoughts
August Max
Banana Republic
Banner's Hallmark Shop
Bath & Body Works
Ben & Jerry's Ice Cream

Bertram's Inkwell Blimpie Subs & Salads

Bombay

**Britches Great Outdoors** 

Brookstone

Bubbles Hair Salon Candy World Carlton Cards Champs Sports Charlotte Russe

Chesapeake Knife & Tool

Chevy Chase Bank

Chick-fil-A

Children's Place, The Claire's Accessories Dakota Watch Co. Desert Moon Café Disney Store, The

**Dulles Express Jewelry Repair Center** 

**ECPI College of Technology** 

Eddie Bauer

**Electronics Boutique** 

Express
Fashion Time
Finish Line
Fink's Jewelers
Flamers

Foliograph Gallery

Foot Locker

| Tenants | Center Name and Information |
|---------|-----------------------------|
| Lenants | Center Name and Information |

Foto Image

Frank & Stein

Gadzooks

Gap/Gap Kids

**General Nutrition Center** 

Great Steak & Potato Co., The

Gymboree

Hecht's

Hot Topic

Icing, The

Ingle's Nook

Jared

Jarman

JC Penney

Journeys

Kay Jewelers

**K&B** Toys

Kelly's Cajun Grill

Kids Foot Locker

Kirkland's

Kohl Bros. Frozen Custard

Lady Foot Locker

Lens Crafters

Lil' Thingamajigs

Limited Too

Little Tokyo

Littman Jewelers

Lord & Taylor

Malibu Grill Express

Master Wok

Mother May I?

Motherhood Maternity

Mr. Rags

Mrs. Fields Cookies

**Nail City** 

Nordstrom

Oasis Concept Spa & Salon

Old Navy

Old Virginia Tobacco Co.

Pacific Sunwear

Payless ShoeSource

The Picture People

Piercing Pagoda

Radio Shack

Rave

Reeds Jewelers

Regis Hair Stylists

Ritz Camera One Hour Photo

Sbarro

Center Name and Information

**Tenants** 

Sears Auto Center

Sears

Select Comfort Shaw's Jewelers

Silver & Gold Connection

Smalls Formalwear

Spencer Gifts
Sterling Optical

Suncoast Motion Picture Co. Sunglass Hut/Watch Station

Things Remembered

**Trade Secret** 

Travel 2000 Travel Gear Tropic Sun Fruit & Nut Twist Again/Kohl Bros. Verizon Wireless

VCH2OH WHOICOS

Victoria's Secret Beauty Co.

Victoria's Secret Virginia Peddlar Waldenbooks Walking Co., The

Washington Redskins Official Store

Wilsons Leather Yankee Candle Co.

Zales

Allfirst bank

Longhorn Restaurant

Red lobster Macaroni Grille Red Robin Restaurant Uno's Chicago Pizzeria

#### **Dulles Town Crossing**

Contact: Darlene McKinnon

Company Name: PLC Management Phone Number: 703-433-5151 Square Footage: 737,503

Year Built: 2002

Classification: Community

TJ Max

Scan Furniture

Dick's Sporting Goods Norwalk Furniture

Subway

Supercuts

Mattress Warehouse Atlanta Bread Company The Carpet Man Inc. Family Christian Stores Beaux Visage Medi Spas Cascades Chiropractic

Memories Pomodoro Pizza Sterling Nails Beauty First Salon

Center Name and Information

**Tenants** 

Avenue Fashions Nordstrom Rack Dress Barn Rack Room Shoes

Bed Bath & Beyond World Market Best Buy

Chevy Chase Bank

McDonalds Lowe's Sam's Club Wal-Mart Ethan Allen Chick-fil-a Bank of America Vitamin Shop Men's Warehouse

**Enterprise Center** 

Contact: Celia Huong Company Name: na

Phone Number: 703-893-5061 Square Footage: 13,000

Year Built: 1987

Classification: Convenience

Cards Warehouse Kiran Grocery Enterprise Cleaners Barefoot Pelican Grille Cynthia Hair Care

Hunan Chinese Restaurant

Ricky's Pizza Ziba Café Subway

Fort Evans Plaza

Contact: na Company Name: na Phone Number: na Square Footage: 345,284

Year Bulit: 1998

Classification: Convenience

Home Depot Food Lion Petco

**Mattress Discounters** 

Virginia ABC Ritz Camera Next Day Blinds

Comprehensive Family Dentistry

Art & Framing Axiom Staffers Angel Cleaners Community Bank

Fort Evans Shopping Center

Contact: na

Company Name: na Phone Number: na Square Footage: 80,708

Year Bulit: 2000

Classification: Neighborhood

Kohl's

#### Center Name and Information

**Tenants** 

#### Great Falls Plaza

Contact: na

Company Name: na Phone Number: na Square Footage: 100,000

Year Built: 1996

Classification: Community

Food Lion

Video Warehouse Fox Chase Tavern China Gourmet Inn Tiger Den Martial Arts Animal Medical Center Advanced Chiropractic

Dunkin Donuts Dog Day Café Papa Johns Subway Stride Rite Euro Café

**Great Falls Chase Cleaners** 

Creative Nails Salon

**Great Clips** 

Central Office - Faxing etc Potomac Falls Florist Chase Art and Frame Byblos Restaurant 1st Virginia Bank Chesterbrook Day Care Lowes Island Auto Repair

Circle K Rite Aid

#### **Industrial Court Plaza**

Contact: Judy McCord Company Name: na Phone Number: na Square Footage: 10,000

Year Built: 1988

Classification: Convenience

Momma Luccies Loudoun Guns

Tanning Center of Leesburg

Budget Cuts CD Cellar

Loudoun Youth Soccer Assoc.

#### Leesburg Corner Premium Outlets

Contact: Adam Silberman

Company Name: Chelsea Property Group, Inc.

Phone Number: 973-403-3192 Square Footage: 463,000

Year Built: 1998

Classification: Destination

Adidas Aerosoles

American Tourister

Banana Republic Factory Store Barneys New York Outlet

Bass

**BCBG Max Aria** 

Bebe

Big Dog Sportswear Bombay Outlet Book Warehouse

Bose

**Bostonian Clarks** 

| Center Name and Information | Tenants |
|-----------------------------|---------|
|                             |         |

Brooks Brothers Factory Store

Burberry

**Burger King** 

Carter's

Chico's

City Deli

Claire's Accessories

Coldwater Creek

Cole Haan

**Country Clutter** 

Crate and Barrel

Dansk

Dockers Outlet by Designs

Dress Barn

Dress Barn Woman

Eddie Bauer

Etienne Aigner

**Factory Brand Shoes** 

Fossil

Fragrance Outlet

Gap Outlet

Geoffrey Beene

Greg Norman

Harry and David

Home Elements

Hoover

**Hush Puppies & Family** 

Izod

J. Crew

Jockey

Jones New York Company Store

Jones New York Country

Jos. A. Bank

K\*B Toy Outlet

Kasper ASL

Kenneth Cole

Kitchen Collection

Le Creuset

Le Gourmet Chef

Leather Loft

L'eggs Hanes Bali Playtex

Levi's Outlet by Designs

Little Me

Liz Claiborne

Liz Claiborne Shoes

Maidenform

Mikasa

Motherhood Maternity

Movado

|                             | <del>-</del> |
|-----------------------------|--------------|
| Center Name and Information | Tenants      |

Music For A Song

Naturalizer

Nautica

New Fashion Jewelry

Nike Factory Store

Nine West

Off 5th - Saks Fifth Avenue Outlet

Old Navy Outlet

Oneida Home

Oriental Rugs And More

Oroton

OshKosh B'Gosh

PacSun

Paper Factory

Perry Ellis

Pfaltzgraff

Polo Ralph Lauren Factory Store

Pottery Barn Furniture Outlet

Quiksilver

Ranch One

Reebok

Reed & Barton

Rockport

Samsonite

Sbarro's Italian, TCBY

Seiko The Company Store

Smithsonian

So Fun! Kids

Springmaid Wamsutta

Sunglass Outlet

The Cosmetics Company Store

Time Factory Watch Outlet

Tommy Hilfiger

Totes / Isotoner / Sunglass World

Ultra Diamond Outlet

**UV3 Sunglasses** 

Van Heusen

Vans

Vitamin World

Waterford Wedgwood

WestPoint Stevens - Bed, Bath & Linens

Williams-Sonoma Marketplace

Wilson's Leather Outlet

Wilson's Leather Outlet

Zales The Diamond Store Outlet

**Bob Evans** 

Middleburg Bank

**TGIF** 

#### Center Name and Information

Tenants

#### Leesburg Park

Contact: na

Company Name: na Phone Number: na Square Footage: 30,000

Year Built: na

Classification: Convenience

#### Leesburg Plaza

Contact: na

Company Name: na Phone Number: na Square Footage: 249,000 Year Built: 1973,1990 Classification: Community McDonalds
The Tire Shop
Tractor Supply Co.

Sheets

Appleby's (closed)

Video Warehouse Bike Outfitters

Leesburg Veterinarian Hospital

Carlson Wagon Travel Manga 1 Hour Photo

**Top Cleaners** 

**Peebles** 

Mattress Warehouse Plaza Barbershop Shenanigan's Pub

Hair Cuttery

American General Finance

Fitness First

Freidmans Jewelers Giovanni's NY Pizza

Stride Rite

Loudoun Optical Co.

Radio Shack Kobe Sushi Pets Etc. Kmart Giant

Books a Million

Treasure House- Hallmark

Trak Auto Coconuts Music

Dr. Bermal's Optometry

**GNC** 

Seven Cleaners

Nova Medical & Urgent Care Long & Fosters Realtors MBH Settlement Corp. First Virginia Bank Southern Financial Bank

Roy Rogers

Chevy Chase Bank

Wendy's Pier 1

Center Name and Information

Tenants

Leesburg Square

Contact: Pete Hutchinson

Company Name: Vaaler Real Estate Phone Number: 703-771-1162 Square Footage: 10,860

Year Built: na

Classification: Convenience

Bargain Place Outlet Mercado Latino

Mi Cantina

Leesburg Checks Cashed

Wireless HQ Hershey Ice Cream Tuck-in Café

Loudoun Valley Shopping Center

Contact: Mike Holden Company Name: na

Phone Number: 401-338-6219 Square Footage: 68,000

Year Built: 1968

Classification: Neighborhood

Salvation Army

Laundry

Purcellville Marketplace Purcellville Nails and Spa New Beginnings Church

Amerigas

Breezeway Bar and Grill Century 21 Realtors

Curves

Del Nora's Hair Salon Eden Cleaners Kline's Barber Shop Door of Fashion Purcellville Florist Valley Autowash 1st Virginia Bank

Amoco Al's Pizza

Main Street

Contact: Lauren Merrit

Company Name: J. Donegan Co. Phone Number: 703-506-1720 Square Footage: 85,000 Year Built: under construction Classification: Neighborhood Giant

Maple Avenue Shops

Contact: na Hoof and Paw Veterinary Service

Company Name: na Subway
Phone Number: na El Rancho
Square Footage: 10,200 Chiropractor
Year Built: na Snippers

Classification: Convenience Blue Bible Church

#### Center Name and Information

Tenants

Market Station

Contact: Heather Hardman

Company Name: Vaaler Real Estate Phone Number: 703-771-1162 Square Footage: 30,000

Year Built: na

Classification: Specialty

Nido Italian

**Designer Goldsmith** Loudoun Credit Union Kim's Tailoring & Cleaners

Scoopers Deli Met Life Hair Savvy

Tuscarora's Restaurant

Visitor Center Leesburg Nails South Street Under

**Edward Jones Investments** 

Severn Mortgage My Friends & Me Gifts

Loudoun Educational Association

Divine

For Goodness Sake Memories Garden Quilts

Middleburg Bank

Leesburg Emporium Tobacco

Mirror Ridge

Contact: na Company Name: na Phone Number: na Square Footage: 137,349

Year Built: na

Classification: Destination

Kohl's Toys 'R' Us Lazy Boy

Parc City-Borders Plaza

Contact: na

Company Name: na Phone Number: na Square Footage: 64,000

Year Built: na

Classification: Community

**Borders** Today's Man

Fitness Resources AT&T Wireless Community Bank Hour Eyes **Next Day Blinds** Chicken Out Rotisserie

Cardinal Bank

Parc City-Heritage Plaza

Cheng's Restaurant Contact: na Company Name: na First Virginia Bank Phone Number: na Easco Verizon Wireless

Square Footage: 11,000 Year Built: na

Classification: Community

Saigon Café Aoba Sushi Fabric Center

Kids Habitat Thrift Shop

Center Name and Information Tenants

Potomac Falls Insurance

Domino's **Accent Beauty PBS Beauty Supply** Parc City Barber Hollywood Nails Wallpaper Etc Tan & Tone Asia Grocery & Gift

Black Orchid Grille

Parc City-Regal Center

Contact: Herb Amman Cardinal Bank Company Name: Centennial Realty Heritage Cleaners

Phone Number: 703-904-0100 Ana Carpet & Flooring Vocelli Pizza Square Footage: 195,844

Year Built: na

Classification: Community Bank of America Regal Dental Care

Kenny's Full Service Salon

Cingular Subway Corner Café Regal Cinema

Taste of Vietnam

Parc City Center

Contact: Jeff Hadlock Basin St. Restaurant

Company Name: na 7-11 Phone Number: na Cleaners Square Footage: 52,000 Burger King Year Built: 1988 Appleby's

Classification: Community Xpress Lube

Potomac Falls

Contact: na Great America Tire & Auto

Algonkian Cleaners Company Name: na

Phone Number: na Texaco Square Footage: 16,023 Euro Market

Year Built: 2001

Classification: Convenience

Potomac Run

Contact: Nicola Carlton Michaels Company Name: Trammel Crowe Joannes

Phone Number: 202-337-1025 Barbeques Galore Square Footage: 488,650 Books A Million

Year Built: 1995

Kitchen Etc Classification: Destination Circuit City Office Depot

#### Center Name and Information

Tenants

Target Ross Kids R Us

Total Wine & Beverage

Costco Supertrak Petsmart Big & Tall

Banifeild Pet Hospital Leather Center Sally Beauty Supply

Toys R Us That's Amore Blinds to Go Cleaners Jiffy Lube Friendly's

Chevy Chase Bank Pacific Restaurant Don Pablo's Sun Trust Bank

Wendys

Outback Steak House

Exxon

#### **Prosperity Center**

Contact: Joe Rinaldes

Company Name: Fried Companies, Inc.

Phone Number: 703-922-7100 Square Footage: 64,448

Year Built: 1987

Classification: Neighborhood

A&M Carpet & Rugs Shooters Café Sam's Stereo

Cingular All State

Keller & Williams Real Estate

Vacuum Store

Blind, Shade & Shutter Napa Auto Parts

Headlines Salon

Dance Academy of Loudoun

Yong-in Martial Arts Orient Kitchen Miracle Nails RJ's Deli

Prosperity Cleaners Leesburg Florist AFI's Jewelers Reitha's Bridal TCBY Yogurt Blockbuster Video

First Union Del Rio

#### Center Name and Information

Tenants

#### Purcellville Center at Blue Ridge Station

Contact: John Bruener

Company Name: Culmore Realty Phone Number: 703-578-3999 Square Footage: 100,000 Year Built: 1990,1995 Classification: Neighborhood Pen's Oriental

State Farm Insurance Saddlery and Such

Cingular

Loudoun Footwear

**USA Nails** 

Loudoun Healthcare Physical Therapy Virginia Alcoholic Beverage Control

Wrap-n-Roll Gift Baskets

Reflections Hairstylists and Tanning

Food Lion the Dog Wash Tim Smith, DDS Movie Gallery Mail-it-all Rite Aid

Long and Foster Realtors

Community Bank
Purcellville Cleaners

Vocelli Pizza

Foot and Ankle Center Sylvan Learning Center

Twigs

First Union Bank McDonalds

#### Purcellville Plaza

Contact: John Bruener

Company Name: Culmore Realty Phone Number: 703-578-3999 Square Footage: 18,000

Year Built: 2002

Classification: Convenience

Creep and Crawl Outfitters

Kreimer Karate
Dominion Water
Mario's Ristorante
American Chimney
Pousson Family Dentistry

Orthodontist Day Care

#### Shenandoah Square

Contact: na

Company Name: Shary Thur and Associates

Phone Number: 703-847-0865 Square Footage: 127,000

Year Built: 1992

Classification: Community

Shoe Show Dollar Tree Discount Vacuum

Wal-Mart Domino's Pizza Taipei Café Jenny Craig Cut Above

Leesburg Pawn & Jewelry

Center Name and Information Tenants

Duron Paint Mattress Country Shanendoah Cleaners

Jolie Nails

Touch of Magic Nails

Mail Stop

Ponderosa Steak House

IHOP Burger King Taco Bell Exxon

South Riding Town Center

Contact: John Zeaser

Company Name: Carl M Freeman Retail LLC

Phone Number: 1-800-54-lease Square Footage: 80,000

Year Built: 2000

Classification: Neighborhood

Family & Cosmetic Dentistry South Riding Pediatrics

**Blockbusters** 

South Riding Cleaners Aldie Vet Hospital Barber Shop

Barber Shop

South Riding Dance Shop

Domino's Pizza South Riding Inn Chun Tae Kwon Do

Subway

Blind, Shade, and Shutter Wong Kok Asian Restaurant

Nails Food Lion

Long & Fosters Realty Heavenly Ice Cream

Cingular Great Clips Starbucks BB&T Bank

Greater Atlantic Bank

Southern Exchange

Contact: Tom Jewell Company Name: na

Phone Number: 703-777-7722 Square Footage: 12,000 Year Built: 1920, 1985 Classification: Specialty Leesburg Jewelers
Barnes Trading Company
Hot Sauces -R.J. & Sauces
Koger Management Group

Cloud Nine

Horner Clock Service Classy Lass & Lad Salon McVey & Associates Realtors

Sterling Center

Contact: Anne Paige Company Name: na

Advanced Carpet

Popeye's

Center Name and Information

Tenants

Phone Number: 703-318-8400 Square Footage: 12,000

Year Built: 1989

Classification: Convenience

Pawn Shop Collectors Corner Sterling Jewelry Chrissie Cleaners Hair Design Academy Dance Asian Grocery

Sterling Park Shopping Mall

Contact: Ray Leverty Company Name: na

Phone Number: 301-899-6080 Square Footage: 110,000 Year Built: 1967,1998 Classification: Neighborhood Family Dollar
Salsabar restaurant
Big Lots Close Out Retailer

Pizza Hut

Sterling Park Cleaners Sterling Funeral Service

Ultrazone Pizza Bolis

Martial Arts America
Jazzercise Fitness
Dr. Culp Optometry
Custom Tailors
Petal-n-Stem
A.S.A.P. Shipping
Family Hair Design
CVS Pharmacy
McDonalds
Community Bank
First Virginia Bank

Taco Bell

High-up Food Mart Kentucky Fried Chicken

Friendly's

Sterling Plaza

Contact: Lisa Bohnet

Company Name: Fried Companies, Inc.

Phone Number: 703-922-7100 Square Footage: 153,276

Year Built: 1987

Classification: Neighborhood

Blockbusters Jerry's Subs

Orlando Hair Studio
Golden China Restaurant

VA ABC

Mighty Mikes Grill Heavenly Ham Coin Laundry Abbey Carpet Dog Salon Maple Cleaners Hancock Fabrics

Children's Therapy Center

**Checks Cashed** 

Pho 333

#### Center Name and Information

#### **Tenants**

Dollar King Computrade

Pepe's Mexican Restaurant

Kartunes Ann's Nails

Tropical Expressions-gifts
The Hang Up-needlework

Manhattan Subs

Come Dance with Me Studio

Safeway

Loudoun Bicycle Sterling Barber All-Tune & Lube Swan Ballet & Dance Yates Auto Parts Don's Asian Market Food Lion (across street)

#### Sterling Town Center

Contact: Ken Baker

Company Name: First Washington Realty

Phone Number: 301-907-7800 Square Footage: 186,448

Year Built: 1974

Classification: Community

7-11

Town Center Cleaners
Town Center Hair Salon

Starbucks Radio Shack

Northern Virginia Flooring

Dollar Tree Party Depot Blockbuster Giant

Glory Days Grille

Cambridge Educational Center

Chevy Chase Bank Rider's Hobby East Coast Hot Tub Davidson Beauty Supply Washington Sports Club

Joes Pizza Sterling Appliance Optometrist

Town Center Cinema

Jeff Smith Karate Darya Kabob Funco Land Key West Tanning Family Dentistry Golden King Hair Cuttery

Village Square Cleaners

Uniglobe Travel

Center Name and Information Tenants

> Nail Palace **Beneficial Finance** Firestone All First bank **McDonalds**

Tried Stone Church

Cleaners Thai Asian Tape Total Video Rosie's Nails Lynn's Barber Shop Papa John's Pizza

Sterling Village Center

Contact: Larry Gasner Omia's Restaurant Company Name: na In & Out Market Phone Number: 301-680-9125 Sunscene 11

Square Footage: 24,357 **Buffalo Wing Factory & Pub** 

Year Built: 1989

Classification: Convenience

Sugarland Crossing

Contact: Brian Miller Party City Company Name: Combined Properties

Phone Number: 202-293-4500 Square Footage: 256,518 Year Built: 1972.1999 Classification: Community

**Burlington Coats** Shoppers

**Tuesday Morning** 

Room Store Family Cosmetic Dentistry

Kids Store Salem Carpet Twice Upon a Child

Kinko's

Universal Hot Tubs Atlantic Tanning MGM Barber Shop Vietnam 75

Pollosinti Chicken **Dollar Magic** Myer Emco Stereo **Expose Nails** Jordan Kitts Music

Sugarland Square

Contact: na Laundry Depot Express Company Name: na Flower Depot Florist

Phone Number: na Pizza Hut

Square Footage: 9,205 **Sugarland Cleaners** Year Built: 1987 Sugarland Beauty Salon Panda West Chinese Classification: Neighborhood

#### Center Name and Information

#### Tenants

#### Tollhouse Center

Contact: Pete Mallios Company Name: na Phone Number: na Square Footage: 33,000

Year Built: 1987

Classification: Convenience

#### Village Center on Seven

Contact: Z. Ghetachew

Company Name: Batman Corporation Phone Number: 703-406-1800

Square Footage: 120,000

Year Built: 1987

Classification: Community

Toll House Cleaners La Villa Roma

Dog School

Loudoun Ballet
Curves for Women
Foot Solutions
Places in the Heart
Twice is Nice

Leesburg Paint & Decorations Susan Brantley Salon & Spa

Pak Mail

Heritage Animal Hospital Pro International Martial Arts

Sterling Soccer Nail Design

Sterling Custom Tailors Potomac Falls Travels

Apollo Tanning

Ace Photo

Hi Tech TV/VCR Repair 1st Nation Carpeter Village Flowers Sterling Vacuums PTL Network Services

Jimmy G's Deli

All State

Nancy's Hair Salon Eye Emporium Optician

H.R. Block

Clock Tower Thrift Shop

Aymon's Pizza Sam's Cleaners Nirvana Indian Pub

International Christian Center

Good Year

High Up Food Mart Sterling Auto Sales First Break Café

Adams Muslim Society
Persian Market and Bakery

Dee Dee's Bridal

Clocktower Chiropractic

Southern Financial

Wendy's Chick Fil A Auto Shop

| Center Name and Information | Tenants     |
|-----------------------------|-------------|
|                             | First Union |

First Union
For Eyes
Dunkin Donuts
Baskin Robins
Abbey Camera
Talking Books
Payless Shoes

Virginia Village Shopping Center

Contact: Bryan Hours Company Name: na Phone Number: na Square Footage: 140,000 Year Built: 1958, 1988

Classification: Community

Wash & Dry YMCA

Antietam Automotive Hair Unlimited Eye Care Center H&R Block

Leesburg Office Supply

VA ABC Leesburg Lock Tompkins Orthopedic Leesburg Chiropractic

Zingers
Terry's' Florist
Page Oriental Rugs
Snip & Clip (Pets)

Dominion Electrical Supply

Fox Glove Gardens
Tuffy's Barber Shop
Dwyer Engineering
Electronic Scryptorium
Leesburg Office Equipment
Rich Insurance Agency

Loudoun County Voter Registration

Ben Franklin Crafts Kids Corner

Video Den

All American Cleaners

Vocelli Pizza Village Autos Leesburg Pharmacy Kittermans Jewelry Catoctin Sports Sterling Carpets

Loudoun National Bank

Town & Country Wellness Center

Leesburg Cleaners Andy's Pizza Bacchus Café Pizza Boli's

Amigos Express Convenience

#### Center Name and Information

#### Tenants

East West Cellular Verizon Wireless

Healthy by Nature-Natural Foods

7-11 Shell

Virginia Kitchen Catoctin Blueprint

Statefarm

Nova Computer Systems

Choice Flooring
Burke Homes
Bill's Copy Center
Anthony & Sylvan Pools
Loudoun Motor Sports

Hair World Post Office Sheriff

Casa Gonzales

Casa Gonzales
JT Hirst
Safeway
Roy Rogers
First Union
Wachovia
Extension Office
VA Dept. of Forestry
Soil Conservation Office

Rite Aid

#### 64 Plaza Center

Contact: Pete Hutchinson

Company Name: Vaaler Real Estate Phone Number: 703-771-1162 Square Footage: 11,700

Year Built: na

Classification: Convenience

Coin Laundry By-Lo Market Joe's Pizza & Subs

Hair For Braids & Weaving

#### Appendix 3

#### The Methodology for Calculating Retail Sales Capture and Leakage

Retail sales capture and leakage is a metric used to determine, on a net basis, the dollar amount that total retail sales are flowing into or out of a particular geography. The method used in this study to calculate those figures is outlined below using an example for Loudoun County, Virginia in 2001.

In general, the methodology of calculating retail sales capture and leakage would be conducted by first calculating an area's share of total income in the U.S. In a simplest version of this methodology, that figure could then be multiplied by total retail sales in the U.S. to determine what that area's expected retail sales would have been. Comparing actual retail sales with expected retail sales would then indicate whether that area was capturing or leaking retail sales. A locality where actual retail sales were higher than expected retail sales would be identified as a locality that was capturing retail sales. A locality where actual retail sales were less than expected retail sales would be identified as a locality that was leaking retail sales.

However, that simple methodology fails to control for differences in income. Retail spending as a percent of household income in high-income households is lower than the same figure for low-income households. Therefore, when using a locality's share of total income in the U.S. to determine expected retail sales, that ratio must be adjusted for incomes. Failure to adjust for income relative to the U.S. makes high-income localities appear "very leaky". Conversely, failure to adjust for income makes low-income localities appear to capture a disproportionately large amount of retail sales. The income measure chosen to make that adjustment in this study was median household income. Mathematically, using per capita income or average household income for that adjustment would not have been as desirable because those measures do not control for income, but instead control for population and number of households, respectively.

Calculating expected retail sales adjusted for household income is conducted by first calculating two ratios. The first ratio, similar to the simple example above, is the locality's share of U.S. total personal income. To repeat, it is calculated by dividing total personal income in a locality by total personal income in the U.S. The second ratio is the locality's median household income as a percent of the U.S.

Once the calculation of those two ratios is complete, the first ratio is then divided by the second ratio and that result is then multiplied by total U.S. retail sales to arrive at expected retail sales for a locality, adjusted for household income. In localities with incomes higher than the U.S., the second ratio will be above one. In localities with incomes lower than the U.S., the second ratio will be below one. Dividing the first ratio by the second ratio will inflate the expected retail sales in localities where incomes are low and deflate expected retail sales in localities where incomes are high, thereby correcting for the fact that retail spending as a percent of household income in high-income households is lower than the same figure for low-income households. Finally, comparing expected retail sales adjusted for income with actual retail sales enables the analyst to determine whether a locality was capturing or leaking retail sales.

An example for Loudoun County is given in Table 3 below. First, data on total personal income (TPI), total retail sales, and median household income were collected for Loudoun County and the U.S. for 2001. That data can be found on the Table 3 on line 1 through line 6. Using that data, several ratios were calculated. The first ratio determines Loudoun County's share of total U.S. income. That figure is 0.08 percent and can be seen on Line 7.

Adjusting the ratio of TPI as a percent of the U.S. for median household income was conducted in lines 8 and 9. Line 8 displays Loudoun County's median household income as a percent of the

U.S. That figure was 194.6 percent for Loudoun County in 2001. In other words, median household income in Loudoun County was 94.6 percent higher than comparable the U.S. figure. To adjust for that high income, TPI in Loudoun County as a percent of the U.S. was divided by the ratio of Loudoun County's median household income as a percent of the U.S. That calculation is presented on line 9. The adjusted share of TPI in Loudoun County was 0.041 percent. It is that figure that is used to calculate expected retail sales in Loudoun County, adjusted for income. That calculation has been performed in line 10. The adjusted share of TPI in Loudoun County, multiplied by total retail sales in the U.S. in 2001 generates expected retail sales adjusted for income and has been displayed as \$1,370.7 million in line 10.

Determining retail sales capture or leakage can then easily be performed by comparing expected retail sales adjusted for income with actual retail sales. As displayed in Line 11, expected retail sales adjusted for income were \$1,370.7 million in Loudoun County. Actual retail sales in that year were \$2,162.5 million, as found on line 3. Therefore, it can be estimated that Loudoun County captured retail sales in the amount of \$791.8 million in 2001 (line 3 minus line 10).

Table 3

Methodology for Calculating Retail Sales Captured in Loudoun County
2001

Collected Data

| Line | <u>Variable</u>                         | <u>Area</u>    | <u>2001</u> <u>Source</u> |
|------|---|----------------|---------------------------|
| 1    | Total Personal Income in 2001 Dollars*  | Loudoun County | \$6,986 Woods & Poole     |
| 2    | Total Personal Income in 2001 Dollars*  | U.S.           | \$8,784,806 Woods & Poole |
| 3    | Total Retail Sales in 2001 Dollars*     | Loudoun County | \$2,162.5 Woods & Poole   |
| 4    | Total Retail Sales in 2001 Dollars*     | U.S.           | \$3,354,134 Woods & Poole |
| 5    | Median Household Income in 2001 Dollars | Loudoun County | \$86,365 Census**         |
| 6    | Median Household Income in 2001 Dollars | U.S.           | \$44,382 Census**         |
|      |   |                |                           |

|      | Calculations  |              |                   |  |  |  |  |  |  |
|------|---|--------------|-------------------|--|--|--|--|--|--|
| Line | <u>Variable</u>   | <u>Value</u> | Calculation       |  |  |  |  |  |  |
| 7    | Total Personal income in Loudoun County as a Percent of U.S.* | 0.08%        | =line 1 / line 2  |  |  |  |  |  |  |
| 8    | Median Household income in Loudoun Relative to the U.S.       | 194.6%       | =line 5 / line 6  |  |  |  |  |  |  |
| 9    | Adjusted share of TPI in Loudoun County as a Percent of U.S.  | 0.041%       | =line 7 / line 9  |  |  |  |  |  |  |
| 10   | Adjusted Expected Retail in Loudoun County*                   | \$1,370.7    | =line 9 * line 4  |  |  |  |  |  |  |
| 11   | Amount of Retail Sales Capture*                               | \$791.8      | =line 3 - line 10 |  |  |  |  |  |  |

<sup>\*</sup> In millions

<sup>\* \*</sup>Extrapolated from 1999 data to 2001 using 1990 and 2000 Census

# Appendix 4 Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area

This appendix contains the amount of retail sales captured and leaked for the eleven retail categories described in this study. The data for general merchandise stores and miscellaneous retail stores were combined into one category. This allowed comparison with many of the localities within the Washington Metro are for which those data were suppressed. Total retail capture/leakage may not equal previously reported figures due to differences in time and data sources. Retail capture and leakage has been displayed in a separate figure for each of the eleven categories described in this study.

A table containing the total amount of retail sales captured as a percent of total retail sales for each category and each locality in the Washington Metro Area can also be found in this appendix.

### Appendix 4 Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area

#### Retail Sales Capture/Leakage by Category and by Locality 1997 In Millions of 2001 Dollars

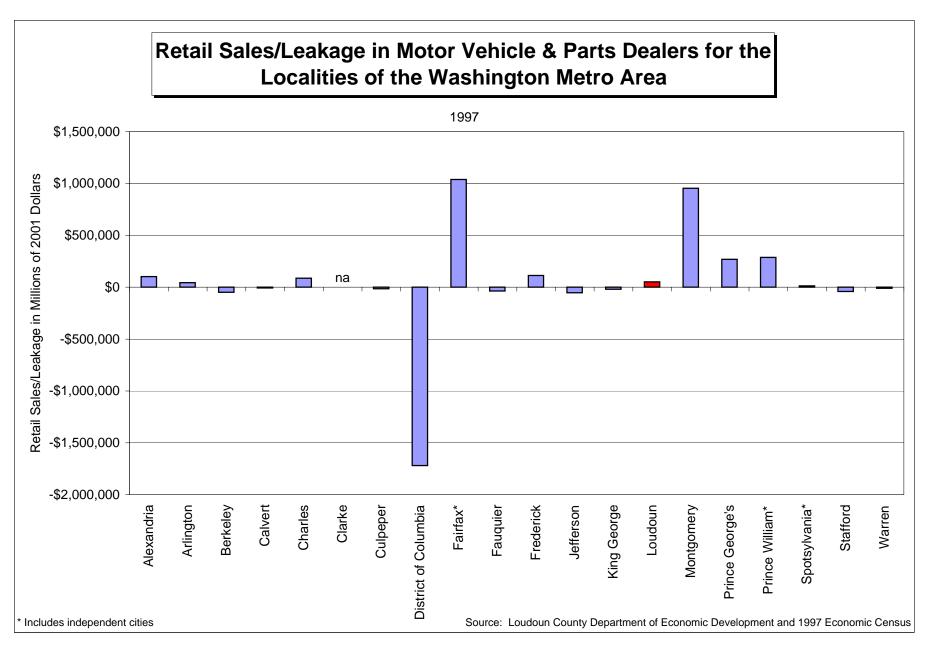
|                           |                 |                    |                  | Building material & |                 |                   |
|---------------------------|-----------------|--------------------|------------------|---------------------|-----------------|-------------------|
|                           | Motor vehicle & | Furniture & home   | Electronics &    | garden equipment &  | Food & beverage | Health & personal |
|                           | parts dealers   | furnishings stores | appliance stores | supplies dealers    | stores          | care stores       |
| Alexandria                | \$102,801       | \$59,502           | \$37,538         | \$32,358            | -\$21,952       | \$20,581          |
| Arlington                 | \$43,616        | -\$12,962          | \$24,776         | -\$113,258          | -\$33,320       | \$12,946          |
| Berkeley                  | -\$48,043       | \$63               | -\$15,774        | \$10,136            | -\$92,432       | -\$27,079         |
| Calvert                   | -\$7,101        | -\$5,865           | -\$7,550         | -\$12,610           | \$50,903        | -\$4,751          |
| Charles                   | \$87,208        | \$11,731           | \$20,052         | \$83,834            | \$85,890        | \$6,611           |
| Clarke                    | na              | na                 | na               | na                  | na              | na                |
| Culpeper                  | -\$14,211       | na                 | na               | \$48,527            | -\$6,282        | -\$588            |
| District of Columbia      | -\$1,719,904    | -\$107,936         | -\$125,599       | -\$482,691          | -\$307,784      | -\$23,115         |
| Fairfax*                  | \$1,039,498     | \$246,894          | \$547,136        | \$133,735           | \$676,888       | \$26,304          |
| Fauquier                  | -\$35,604       | -\$8,050           | -\$7,822         | \$3,966             | na              | -\$2,195          |
| Frederick                 | \$112,737       | \$16,053           | \$5,787          | \$181,751           | \$109,033       | \$5,157           |
| Jefferson                 | -\$52,919       | -\$5,320           | na               | -\$15,256           | na              | na                |
| King George               | -\$19,559       | na                 | na               | -\$9,733            | na              | na                |
| Loudoun                   | \$51,016        | \$28,496           | \$25,526         | \$54,238            | \$113,187       | \$2,874           |
| Montgomery                | \$954,529       | \$119,394          | \$198,154        | -\$53,464           | \$506,453       | \$54,180          |
| Prince George's           | \$268,426       | \$44,306           | \$24,947         | \$64,957            | \$553,069       | \$22,559          |
| Prince William*           | \$286,958       | \$79,943           | \$73,662         | \$50,712            | \$57,086        | -\$24,824         |
| Spotsylvania*             | \$12,445        | \$11,761           | \$4,011          | -\$25,171           | -\$7,145        | -\$8,655          |
| Stafford                  | -\$41,244       | -\$6,924           | -\$4,380         | -\$16,055           | na              | \$3,294           |
| Warren                    | -\$9,477        | -\$2,765           | -\$3,449         | -\$8,883            | \$12,401        | na                |
| Washington, DCMDVAWV PMSA | \$1,395,594     | \$500,032          | \$825,591        | \$182,856           | \$2,101,847     | \$130,543         |

|                           |                   |                     |                 | General merchandise |                    |
|---------------------------|-------------------|---------------------|-----------------|---------------------|--------------------|
|                           |                   |                     | Sporting goods, | stores and          |                    |
|                           |                   | Clothing & clothing | hobby, book, &  | Miscellaneous store |                    |
|                           | Gasoline stations | accessories stores  | music stores    | <u>retailers</u>    | Nonstore retailers |
| Alexandria                | -\$30,395         | \$4,937             | \$1,899         | -\$3,712            | -\$15,546          |
| Arlington                 | -\$37,420         | \$148,719           | \$31,771        | \$31,800            | -\$80,379          |
| Berkeley                  | \$12,414          | \$24,740            | -\$4,518        | \$131,160           | -\$10,132          |
| Calvert                   | \$12,251          | -\$13,240           | -\$7,467        | -\$13,164           | \$2,507            |
| Charles                   | \$31,886          | \$31,878            | \$23,744        | \$170,582           | -\$14,277          |
| Clarke                    | \$11,644          | na                  | na              | na                  | -\$2,886           |
| Culpeper                  | \$14,215          | na                  | na              | na                  | \$591              |
| District of Columbia      | -\$346,675        | -\$6,170            | \$2,656         | -\$834,122          | -\$297,771         |
| Fairfax*                  | -\$10,215         | \$494,802           | \$252,200       | \$348,027           | -\$113,183         |
| Fauquier                  | \$18,299          | -\$13,680           | -\$2,430        | na                  | -\$21,081          |
| Frederick                 | \$49,004          | -\$5,976            | \$12,236        | \$84,140            | -\$9,001           |
| Jefferson                 | \$1,747           | -\$15,493           | -\$7,380        | na                  | \$6,101            |
| King George               | na                | na                  | na              | na                  | na                 |
| Loudoun                   | \$32,465          | \$5,125             | \$30,393        | \$134,715           | -\$16,930          |
| Montgomery                | -\$98,495         | \$311,313           | \$170,725       | -\$56,683           | -\$157,907         |
| Prince George's           | \$28,297          | \$18,839            | \$32,906        | -\$18,731           | -\$138,763         |
| Prince William*           | \$41,087          | \$178,329           | \$35,556        | \$67,342            | -\$55,375          |
| Spotsylvania*             | \$8,812           | -\$19,614           | -\$13,389       | \$94,733            | -\$32,929          |
| Stafford                  | \$55,917          | na                  | na              | na                  | na                 |
| Warren                    | \$6,675           | -\$5,419            | na              | na                  | na                 |
| Washington, DCMDVAWV PMSA | -\$63,233         | \$1,186,232         | \$587,066       | \$198,028           | -\$920,964         |

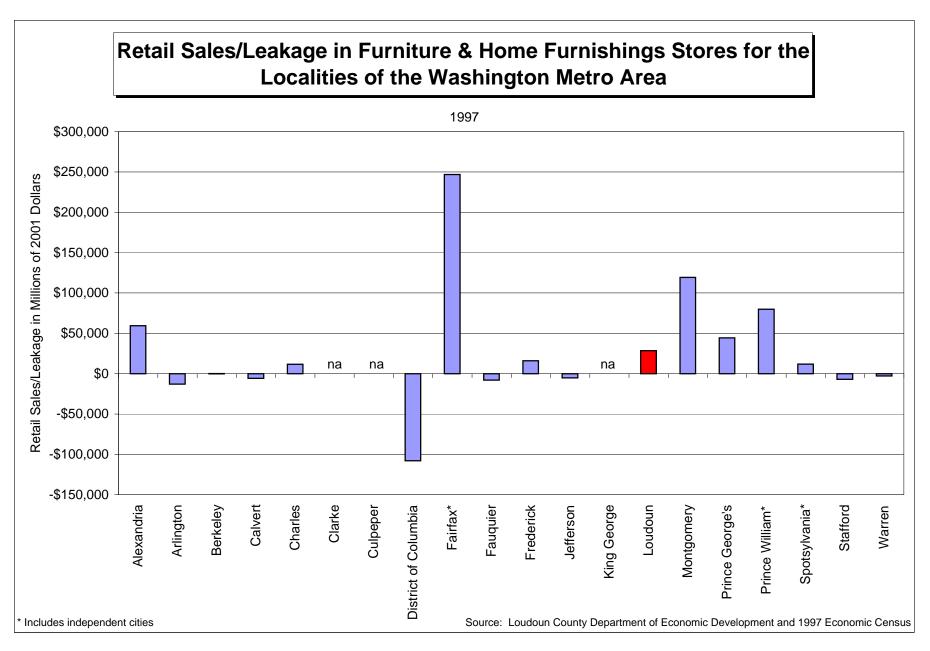
<sup>\*</sup> Independent cities included na- not available due to data supression

Source: Loudoun County Department of Economic Development and 1997 Economic Census

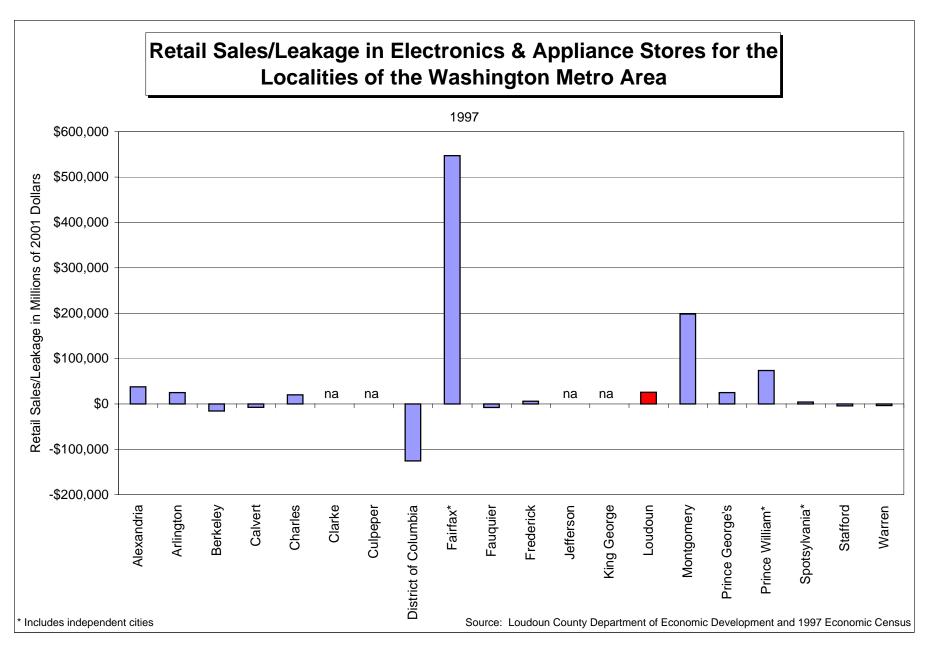
Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



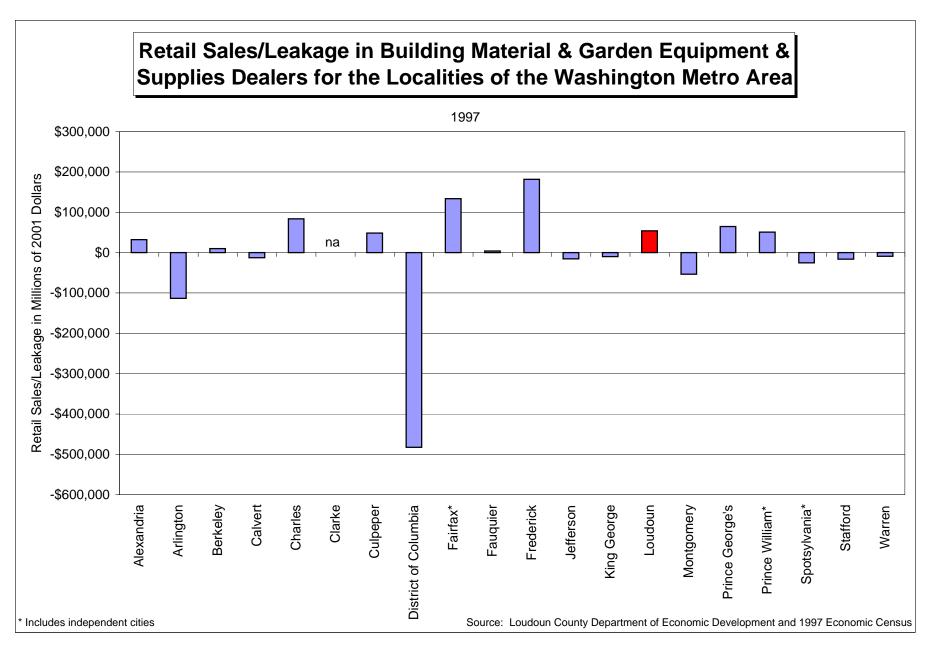
Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



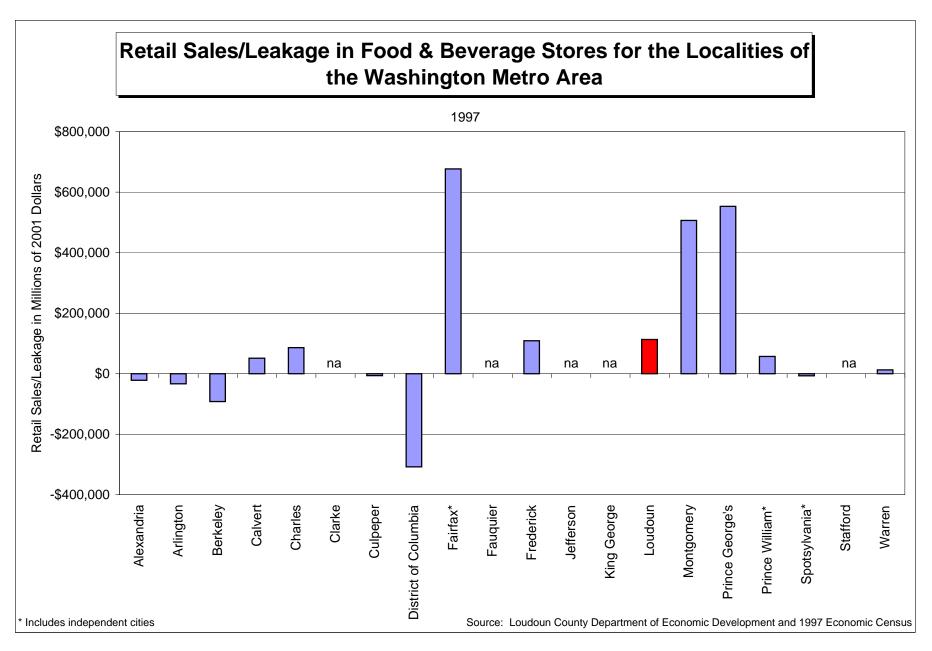
Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



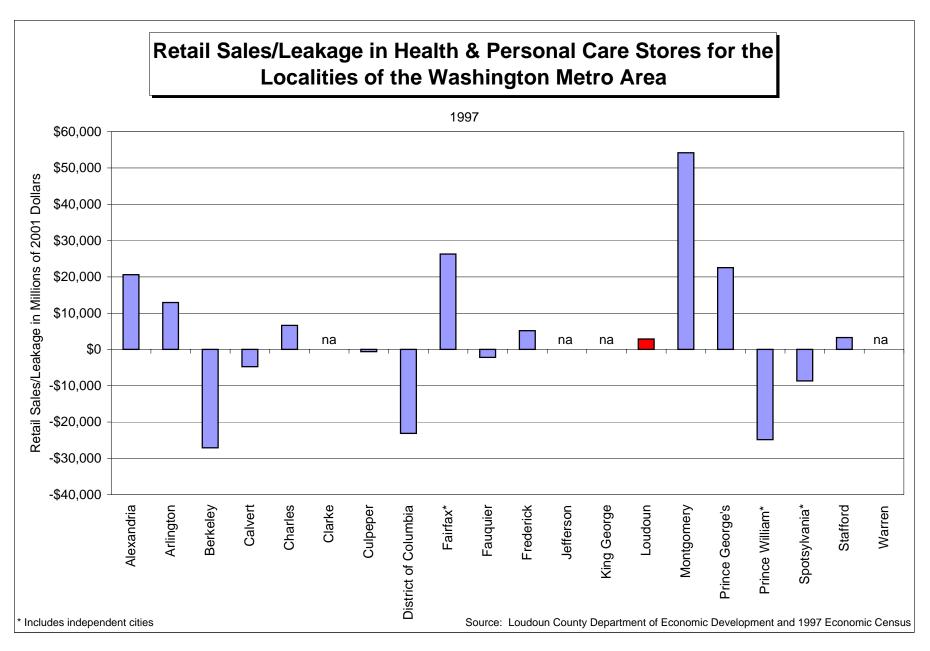
Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



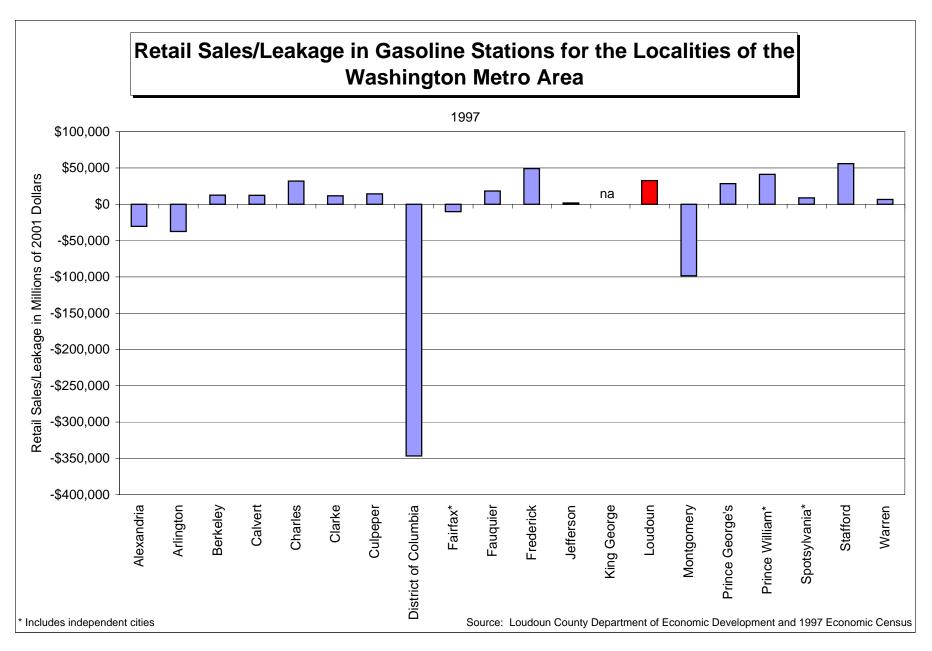
Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



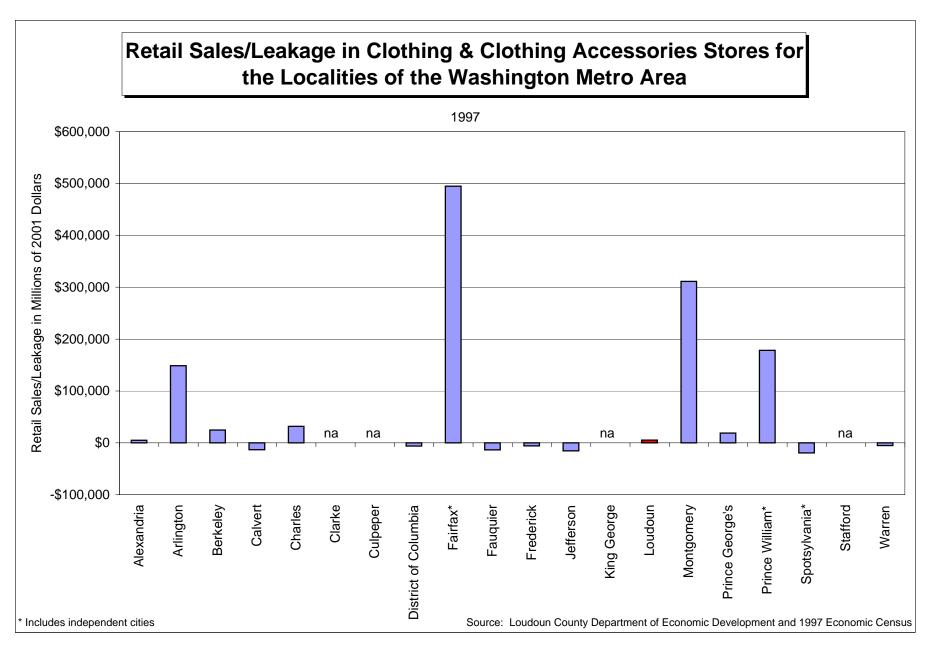
Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



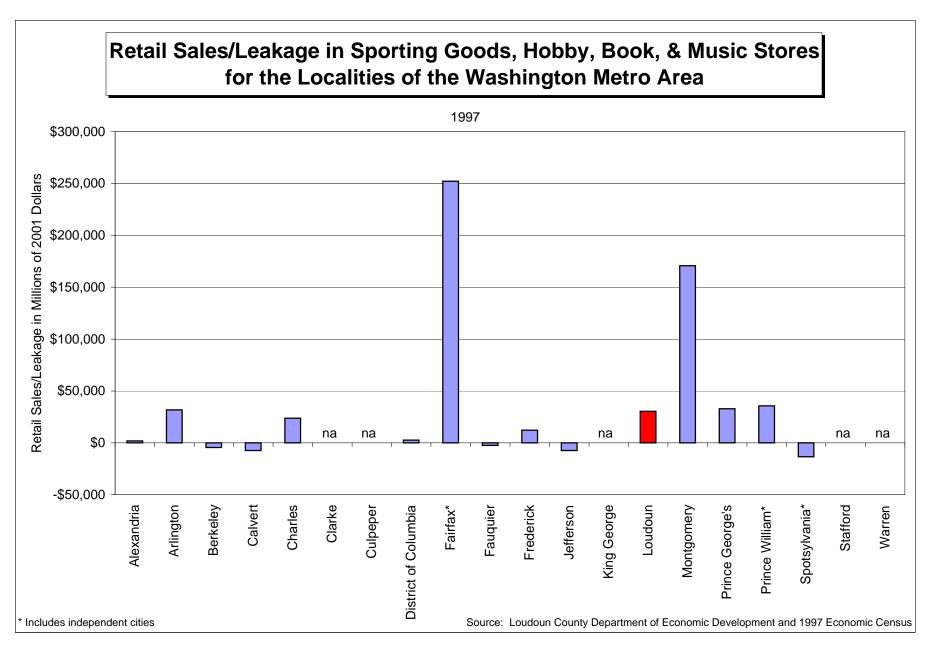
Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



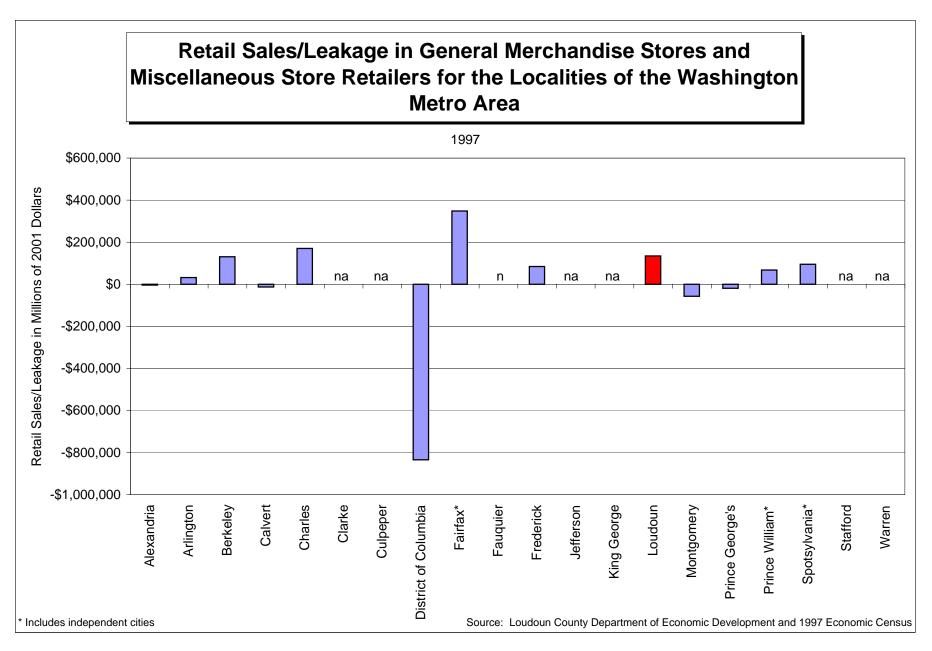
Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



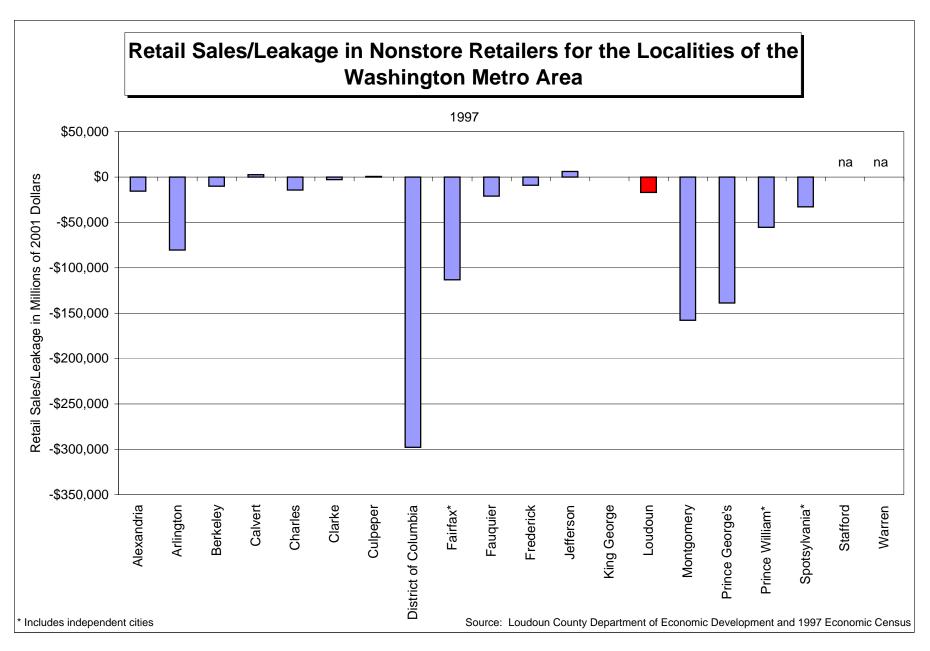
Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



Appendix 4
Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area



### Appendix 4 Retail Sales Capture/Leakage by Category in the Localities of the Washington Metro Area

Retail Sales Capture/Leakage as a Percent of Total Retail Sales by Category and by Locality 1997 In Millions of 2001 Dollars

|                           |                 |                    | 200. 20          |                     |                 |                   |
|---------------------------|-----------------|--------------------|------------------|---------------------|-----------------|-------------------|
|                           |                 |                    |                  | Building material & |                 |                   |
|                           | Motor vehicle & | Furniture & home   | Electronics &    | garden equipment &  | Food & beverage | Health & personal |
|                           | parts dealers   | furnishings stores | appliance stores | supplies dealers    | stores          | care stores       |
| Alexandria                | 22.9%           | 60.8%              | 50.5%            | 21.0%               | -11.3%          | 24.6%             |
| Arlington                 | 8.4%            | -32.8%             | 33.0%            | -211.8%             | -12.8%          | 13.1%             |
| Berkeley                  | -47.8%          | 0.4%               | na               | 16.2%               | na              | na                |
| Calvert                   | -7.1%           | -96.4%             | -194.8%          | -49.8%              | 43.2%           | -32.0%            |
| Charles                   | 32.1%           | 36.4%              | 50.5%            | 56.3%               | 42.8%           | 16.4%             |
| Clarke                    | na              | na                 | na               | na                  | na              | na                |
| Culpeper                  | -27.1%          | na                 | na               | 67.4%               | -17.8%          | -5.1%             |
| District of Columbia      | -1367.2%        | -111.2%            | -178.2%          | -287.1%             | -36.6%          | -7.4%             |
| Fairfax*                  | 35.3%           | 53.9%              | 73.0%            | 16.6%               | 36.3%           | 7.0%              |
| Fauquier                  | -47.5%          | -190.5%            | -199.6%          | 9.2%                | na              | -12.2%            |
| Frederick                 | 25.2%           | 30.1%              | 14.0%            | 60.6%               | 34.3%           | 7.8%              |
| Jefferson                 | -163.1%         | -127.8%            | na               | -102.8%             | na              | na                |
| King George               | -150.8%         | na                 | na               | -560.3%             | na              | na                |
| Loudoun                   | 19.2%           | 54.4%              | 52.7%            | 41.7%               | 45.8%           | 6.8%              |
| Montgomery                | 34.3%           | 37.0%              | 50.5%            | -9.1%               | 30.8%           | 14.0%             |
| Prince George's           | 15.7%           | 21.7%              | 14.0%            | 11.3%               | 38.2%           | 7.9%              |
| Prince William*           | 38.2%           | 60.8%              | 59.9%            | 23.6%               | 16.5%           | -41.4%            |
| Spotsylvania*             | 6.2%            | 36.2%              | 16.8%            | -61.8%              | -6.5%           | -34.0%            |
| Stafford                  | -55.7%          | -117.7%            | -55.7%           | -65.3%              | na              | 13.5%             |
| Warren                    | -18.1%          | -67.5%             | -110.6%          | -68.8%              | 24.4%           | na                |
| Washington, DCMDVAWV PMSA | 12.4%           | 31.3%              | 44.1%            | 5.0%                | 25.5%           | 6.8%              |

|                           |                   |                     |                 | General merchandise |                    |
|---------------------------|-------------------|---------------------|-----------------|---------------------|--------------------|
|                           |                   |                     | Sporting goods, | stores and          |                    |
|                           |                   | Clothing & clothing | hobby, book, &  | Miscellaneous store |                    |
|                           | Gasoline stations | accessories stores  | music stores    | <u>retailers</u>    | Nonstore retailers |
| Alexandria                | -40.1%            | 6.3%                | 5.4%            | -1.7%               | -30.8%             |
| Arlington                 | -34.7%            | 59.8%               | 41.2%           | 9.6%                | -818.4%            |
| Berkeley                  | 21.4%             | 44.1%               | -46.3%          | 58.3%               | -55.7%             |
| Calvert                   | 27.1%             | -139.5%             | -260.4%         | -24.0%              | 10.9%              |
| Charles                   | 36.0%             | 44.9%               | 57.2%           | 59.3%               | -68.1%             |
| Clarke                    | 59.8%             | na                  | na              | na                  | -146.3%            |
| Culpeper                  | 41.0%             | na                  | na              | na                  | 4.4%               |
| District of Columbia      | -157.5%           | -1.6%               | 1.5%            | -249.5%             | -548.3%            |
| Fairfax*                  | -1.8%             | 55.1%               | 57.9%           | 22.4%               | -45.2%             |
| Fauquier                  | 35.0%             | -141.4%             | -29.7%          | na                  | na                 |
| Frederick                 | 32.3%             | -9.2%               | 27.5%           | 28.4%               | -16.4%             |
| Jefferson                 | 6.2%              | -608.1%             | -897.8%         | na                  | 27.3%              |
| King George               | na                | na                  | na              | na                  | na                 |
| Loudoun                   | 32.9%             | 10.1%               | 59.5%           | 49.7%               | -70.1%             |
| Montgomery                | -21.3%            | 44.6%               | 49.3%           | -5.2%               | -82.9%             |
| Prince George's           | 6.0%              | 5.8%                | 19.2%           | -2.1%               | -102.1%            |
| Prince William*           | 22.4%             | 64.5%               | 44.3%           | 18.6%               | -166.3%            |
| Spotsylvania*             | 13.3%             | -98.6%              | -292.9%         | 44.5%               | -1207.5%           |
| Stafford                  | 61.2%             | na                  | na              | na                  | na                 |
| Warren                    | 26.0%             | -70.9%              | na              | na                  | na                 |
| Washington, DCMDVAWV PMSA | -2.1%             | 36.3%               | 38.2%           | 3.1%                | -95.8%             |

<sup>\*</sup> Independent cities included na- not available due to data supression

Source: Loudoun County Department of Economic Development and 1997 Economic Census